Mr. Oldfield Thomas cxhibited three adult specimens, a male and two females, of the Borncan Monkey recently described by him under the name of Semnopithecus cruciyer. These specimens showed that this Monkey was after all fully as large as S. chrysomelas and $S$. hosei, the adnlt male haring a body 520 mm . and a tail 700 mm . in length; so that the typical skin must have been decidedly immature. In the male specimen the coloration was almost exactly similar to that of the type, but in the two females the broad black dorsal line was interrupted just below the level of the shoulders for a distance of two or three inches, the hairs being here red as on the flanks, but still intermixed with black. In all three also there was a blackish patch on the postero-internal side of the lower leg, but this patch varied in its intensity, and was not risible in the type. The crest in these specimens was much more developed than in the yonnger example, the hairs on the occiput attaining a length of nearly three inches, and being mixed black and red, owing to the red crown hairs mingling with the black ones of the anterior end of the dorsal black line.
'These specimens had been taken on the Batang Hupar River', Western Sarawak, in August 1892, by one of Mr. Hose's collectors; and Mr. D. J. S. Baily, a resident in the neighbourhood, had informed Mr. Hose that he had often seen black and red Monkeys, presumably of this form, in the forests of the district.

In spite of the confirmation given by these facts, Mr. Hose himself was inclined to think that $S$. cruciger might be only a red form or "erythrism" of S. chrysomelas, the common black and white Monkey of Sarawak, in the company of which he believed he had seen the specimen first described by Mr. Thomas. Mr. Hose pledged himself specially to investigate this most interesting question on his return to Borneo.

The following papers were read:-

1. A proposed Classification of the Hesperiide, with a Revision of the Genera. By Lieut. E. Y. Watson, Madras Staff Corps, F.Z.S., F.E.S.
[Receired October $27,189$. .]
(Plates I.-III.)
The arrangement here proposed is based entirely upon the collection of the British Museum; therefore only the species represented in the National Collection are referred to their respective genera, those species of which the types are in the collection being marked with an asterisk.

As the time at my disposal has been strictly limited, only such new genera have been described as differ very markedly from those

[^0]already established ; so that it will be found that there are many species noted below for which new genera have not been erected, but which have been placed in that genus to which they seem most eloscly allied. In addition to the collection of the British Museum, free access has been afforded me to the valuable collection of Messrs. Godman and Salvin, to whom my best thanks are due for their courtesy and kind assistance.

The system of numbering the veins has been adopted in the descriptions for brevity and clearness, and, as this system is not in universal use, the veins in the first figure of neuration have been numbered to exemplify the method.

Before 1874 no serious attempt had been made to arrange the genera of the Hesperiidæ in natural groups, but since that time several arrangements, though in most cases ouly relating to a limited fauna, have been proposed.

The only suggested arrangement which seems to be perfectly natural is that proposed by Scudder in the Bulletin of the Buffalo Society of Natural Science ${ }^{1}$, and afterwards worked out more completely in his 'Buttcrflies of New Eugland.' Though it is ouly for the Hesperiidæ of New England that this arraugement is fully worked out, yet, on examination, it has been found, with certain modifications, applicable to the Hesperiid genera of the world, and has accordingly been adopted in this paper. In this arrangement Scudder disides the genera of New Englaud Hesperiidæ into two groups, which he names respectively Hesperidi and Pamphilidi. These two divisions are based to a very large extent on the secondary sexual characters of the male imago, the egg, larva, and pupa supplying subsidiary characters; these latter, however, are, as pointerl out, of a slight and ill-defined character, and would be inapplicable generally, since, in the great majority of the genera, little or nothing is known of the earlier stages. The male characters are, however, sufficient in themselves to enable the majority of the genera to be readily assigned to the respective groups, and where no secondary male characters exist the neuration or habits supply the necessary indication.

Mabille has further amplified this arrangement of Scudder's in a paper ${ }^{2}$ on the Hesperiidæ in the Brussels Museum, wherein he further subdivides the main divisions and assigns additioual genera to their respective groups. These further subdivisions have unfortunately been only very partially characterized, owing, as M. Mabille himself states, to his investigations not being completed.

In the allocation of many genera I have found it necessary to eutirely differ from M. Mabille's conclusions; for instance, nearly all those genera which Mabille includes under his subdivisions "Ismenini" aud "Tayiadini,", and assigns to the Astyci=Pamphilidi (Sculder), should, in my opinion, be transferred to the Hesperidi (Scudder), with which their habits and neuration better agree, and Mabille's "tribe" Pyrrhopygini be erected into a group of equal

[^1]importance to Scudder's Hesperidi and Pamphilidi, this latter being an alteration already suggested by Scudder himself.

Passing by the arrangement of Plötz, which, being based largely on the pattern of the wings, has been found quite unworkable, and that of Distant, which was a tentative one only intended to be applied to the fama then under consideration, we come to a valuable paper ${ }^{1}$ by Speyer on the "Genera of the Hesperiidæ of the European Fanna." In this paper he makes a suggestion which has been found of the very greatest importance in the classification of the genera: this suggestion was to the effect that the positiun of vein 5 of the fore wing in relation with veins 6 and 4 would probably prove a character of value. This surmise has proved to be correct, and the position of rein 5 has been found of great use in the arrangement of the Hesperiidæ, as it has already proved to be for the division of the Heterocera into two large groups of families.

In the following arrangement it has been nttempted to make inention of every generic name published prior to 1892 , and to point out its type species, though, where this species has not been accessible, it has not been possible in most cases to assign the genms to its correct position. This is in great part owing to the very superficial manner in which some, even recent, authors characterize their genera, in many cases doing no more than specifying the species they propose as their type, so that when oue is not in possession of that particular species the genus is quite murecognizable.

Whenever no particular species has been designated by the author of a genus as his type of that gemus, it has becn found most satisfactory to follow Scudder's 'Historical Sketch of the Genera of' Butterflies,' published in 1875, as in that work he has investigated the history of the genera from the earliest anthors, and has fixed the types in accordance with the strictest rules of priority, and therefore in the opinion of the writer his decisions should be aecepted by all subsequent authors, who will thus have a sound basis to start from, and a muiform system would result instead of the chaos which is caused by each author arbitrarily fixing the type of the genera of earlier anthors on a system of his own.

The decisions of Mr. Scudder have therefore been accepted for all genera included in the above-quoted work; while for those genera which have been described subsequently, when no type has been specified, that species has been taken which best agrees with the diagnosis of the genus. In the great majority of genera it has been found practicable to clear the wings of a specimen of the typical species, whereby its diagnosis has been considerably facilitated.

In all, 234 generic names have been dealt with, of which 49 are sunk as synonyms, while 45 new genera have been described, and at least as many more await description in British collections alone.

As in the British Museum collection the two genera Megathymnus and Egiale arc arranged in the IHeterocera, they are not included below, though some authors consider they should be treated

[^2]as Hesperiidæ ; the Australian genus Euschernon, which is furnished with a frenulum, one of the most distinctive characters of the Heterocera, has also been omitted; should subsequent authors consider these three genera are more naturally placed in the Hesperiidæ, it will be necessary to establish two additional subfamilies for their reception.

With regard to the rexed question of the generic importance of male secondary sexual characters, the conclusion which has been forced upon me is that, in any particular genus in which male secondary characters are found, the particular male character (be it costal foid, discal stigma, or tuft of hairs) may be either present or absent in different species of that same genus, but is nerer replaced by a character of different structure. Of the inconstancy of the male character in the same genus the following are examples:Eudamus, Thorybes, Hesperia, Urbanus, Ismene, Husora, Keranu, Padraona, Taractrocera, Chapra, Baoris, ILalpe, and many others might be brought forward; but on the ocher hand it is difficult to quote a single genus in which the male character is replaced by another of similar character, and in a few cases where this is apparently the case in the following paper, it is owing to new genera not haring been erected for the aberrant forms though manifestly distinct, time not allowing of the critical examination necessary.

On every other occasion when the male secondary character differs in structure, an accompanying difference will be found in the neuration, antenne, or other point of structure.

The above being the case, the costal fold, discal stigma, or other structural peculiarity of the male insect, though frequently not a generic character, is yet of the greatest importance in the formation of groups or subfamilies, and, as has already been pointed out by Scudder, all those species which are provided with a costal fold belong to the IIesperiince, and all those provided with a discal stigma to the Pamphilince.

Though the above conclusion is not in accordance with the theory of many anthors, yet it will be found that no author can be quoted who does not adinit it in practice; for instance, Scudder places bathyllus and pylades in the same gems Thorybes, though the former is without a costal fold and the latter is provided with one; Mabille, in his paper above quoted, includes in the genera Thymele, Liddamus, Ethilla, Ismene, Panphila, and others species both provided with and deroid of male secondary characters; Moore, who is one of the strongest adrocates for the generic importance of male characters, yet, under the same generic name Thanaos, describes indistincta and stigmata, the former of which lacks the discal stigma of the latter, includes in his own genus Halpe the species radians, though without the discal band characteristic of the genus, describes athiusoni, subtestaceus, nilgiriana, and vindhianu, all as belonging. to the genus Isoteinon, though the two former possess a tuft of hairs on the fore wing which is wanting in the latter, and acts similarly on several other occasions; while Distant and Trimen in their respective works allow to male characters no generic importance
whatever. Mr. de Nicéville also informs me that though he wonld attach more importance to the male-marks in Hesperiidæ and Lycænidæ than in other families, yet he considers that each case must be judged on its merits.

While referring to this subject, it seems worth calling attention to the rery few Old World genera which are provided with a costal fold on the fore wing, those provided with a discal streak or other character largely predominating, while in the New World the numbers of each group seem fairly equal.

The characters which have been fonnd of the greatest value in dividing the family into groups or subfamilies are (the Pyrrhopygince being first excluded on their abnormal antenmæ) firstly the position of vein 5 of the fore wing, taken in conjunction with the length of the cell, this vein in the Hesperiince being invariably nearer to $G$ than to 4 when the cell of the fore wing is less than two-thirds the length of costa, and only nearer to 4 when the cell is more than two-thirds the length of costa; while in the Pamphiline vein 5 of the fore wing is never nearer to 6 than to 4 except in a few aberrant Australian genera, and usually is very much nearer to 4 , in a few cases only being practically equidistant between the two veins, while on the other hand the cell of the fore wing never exceeds twothirds of the length of the costa, except in one or two Asiatic genera of the Ismene group, which are readily distinguished from all Hesperiince by their peculiar palpi and antennæ.

The presence or absence of vein 5 of the hind wing has been found of no importance as a character for groups of genera, as it occurs in all stages of development in closely allied genera; it has, therefore, only been treated as present when it has been fully developed into a tubular veiu, and in all other cases has been treated as absent, though it is usually just traceable as a fold or weak vein, being only absolutely invisible in some genera of Pamphilince, chiefly those in which vein 5 of the fore wing is very close to the bottom of the cell. It is noteworthy that there is no genus of Pamphilince or the Hesperiince occurring in the New World in which vein 5 of the hind wing is fully developed into a tubular vein, the only New World genera in which this vein is developed being the Pyrrhopygine genera Amenis and Ardaris, the former of which would appear to be in a transitional state, the development of the rein rarying individually in the same species.

The presence or absence of the tibial epiphysis on the fore legs has only been found of secondary importance, varying in some cases in different species of the same genus, and apparently being present or entirely wanting in different individuals of Aluantis lettensis, Hopff.

On the hind tibie both terminal and medial pairs of spurs are almost invariably present, and the absence of the middle pair is usually of generic importance, though in the genera Cyclopides, Heteropterus, and Pythonides the absence of this pair of spurs is only of specific value.

Another character of the greatest importance is the position
assumed by the species when in a state of complete repose; and it will be found that all those species which are known to rest with their wings expanded fall naturally into the Pyrrhopygince or Hesperiince, and in no single instance into the Pamphitince, and only in very few instances are species of these two subfamilies known to rest with their wings raised over their backs.

The only other character which has been fonnd of importance is the description of secondary male characters fuund on the upper side of the fore wing, and this is limited in its value by there being in many genera no secoudary male characters on the fore wing. However, the costal fold is never found except among the Hesperiince, and the discal stigma of whatever form never except among the Pamphitince; other male characters, such as tufts and patches of modified scales on the underside of the fore wing, either side of the hind wing, or on the legs, appear to be shared in common by both Hesperiïnce and Pamphilince.
There is little doubt that when more is known of the earlier stages of the family other characters will be found, but at present it is quite impracticable to generalize from the few facts known. A little has been done in this direction by Scndder in the 'Butterflies of New England,' but only very few genera are referred to, and the characteristics there given as peculiar to the Hesperiince and Pamphitince do not seem to hold when applied to the few Old World species of which it has been found practicable to examine the earlier stages; no mention of these stages has therefore been made in the present paper, pending fuller investigations.

The terms used in the descriptions are as follows :- the antennæ are called "hooked" when the terminal portion of the club is bent to less than a right angle with the remaining portion of the club, and "sickle-shaped" when the whole of the club is evenly curved and not abruptly angled; when the club is abruptly angled but not "hooked" it is spoken of as simply "bent." The palpi are termed "porrect" when the third joint is extended horizontally in front of the face in continuation of the axis of the body, "erect" when the third joint is extended perpendicularly in front of the face at right angles to the axis of the body-in this case the third joint frequently curves back over the vertex-and "suberect" when the third joint of the palpi lies at less than a right angle with the axis of the body. These terms are only used when the third joint is more or less conspicuons and its direction obrions; in the majority of genera the thiru joint is very short and inconspicnous, and in describing these no mention is made of its direction, which is in many cases difficult to definitely point ont, and would render the diagnosis liable to misconception. In comparing the length of the cell with the length of the costal margin, the latter is measured in a straight line from the base of the wing to the apex, and the former from the base of the wing to the upper angle of the cell. The length of the imner margin is measured in a straight line from the base of the wing to the outer angle, and the outer margin in a straight line from the vuter angle to the apex of the riug. The veins are treated as
arising at where they bifurcate from the main trunks: $i$. e. veins 1 and 12 of the fore wing, and $I a$ and $1 b$ of the hind wing, are treated as arising from the base of the wing ; reins 2 and 3 of both wings as arising from their bifnreation with the median; veins 7,8 , $9,10,11$ of the fore wing and 7 and 8 of the hind wing as arising from their bifurcation with the subcostal ; reins 6 and 4 of both wings as arising at the points where they are met by the middle and lower discocellulars respectively; and, lastly, vein 5 of both wings as arising at the junction of the midule and lower discocellulars. The median from the base of the wing to the lower angle of the cell is termed the "lower margin of the cell," and the snbcostal from the base of the wing to the upper angle of the cell the "upper margin of the cell."

In the generic keys to the sereral sections the more superficial and readily recognizable characters have been constantly employed; the male secondary sexual characters, though used frequently, being taken only where the same character is fomid thronghout the whole genus.

It has been found impracticable to arrange the genera in their natural order in the keys, so the genera of each section are numbered in the order which seems most natural, and the descriptions are arranged to accord with these numbers.

The following three subfamilies have been adopted in this arrangement, detailed descriptions of which will be found in the text, while they may be briefly compared as follows:-

Pyrrhopygine. -This is a well-marked group of closely allied genera confined entirely to the New World, which can be readily recognized by the large blunt club to the antennæ, which is a constant character. The cell of the fore wing is also invariably very long, being more than two-thirds the length of the costa. Vein 5 of the fore wing is usually nearer to 4 than to 6 . When at rest they extend all their wings horizontally.

Hesperinee.-This group includes all species with a costal fold in the male, all species in which vein 5 of the fore wing is nearer to $G$ than to 4 , and all species which rest with their wings extended horizontally. Some few species rest with their wings raised abore the back, but these are very few and can invariably be recognized ly the costal fold or some other character; also, in a considerable number of genera in which the cell is more than tro-thirds the length of the costa, vein 5 is usually slightly nearer to 4 than to 6 ; this is occasioned by the upper angle of the cell being produced, and the middle discocellular consequently elongated. These genera, howerer, are readily recognized by the length of the cell, as in the Pamphilince, where it is only in a very few well-marked genera that the cell exceeds two-thirds of the costa.

The antennæ, almost without exception, end in a fine point, and $i_{r}$ the few genera in which this is not the case the cell is invariably short.

Pamphiline.-This group includes all species with a discal band on the fore wing of the male, and all species in which vein 5 of the
fore wing is nearer to 4 than to 6 , with the exception of those noted abore. When in a complete state of repose all the species of this group rest with their wings raised above their backs; but when only sumbing themselves, in many species the fore wings are elevated and the hind wings depressed. The cell of the fore wing is almost invariably less than two-thirds the length of the costa, and the antemne almost inrariably end in a five point.

## Subfamily I. Pyrrhopygine.

Antenne: club rery thick, ending in a blunt point, usually more or less bent into a hook. Palpi : second joint densely scaled, closely pressed against the face; thirl joint naked, minute. Cell of fore wing always more than two-thirds the length of costa. No costal fold or other secondary sexual characters on fore wing of male. Vein 5 of fore wing nearer to 4 than to 6 . Vein 5 of hind wing nsually wanting. Hind tibiæ usually with two pairs of spurs.

The thick blunt club to the antenne will at once distinguish this subfamily : a few of the lower genera of Hesperiince aud some Australian Pamphiline have a somewhat similar club; but in them the cell of fore wing is invariably less than two-thirds the length of costa.

This subfamily exactly coincides with the Pyrrhopygini of Mabille, which he places as a scction of his Hesperidi; however, its characteristics are so well marked that it has here been treated as a subfamily of equal value with the Hesperiince and Pamphilince. Little or nothing is known of the carly stages of this subfamily, but the perfect insect seems in many ways to have affinities to both Hesperiince and Pamphilina, and its correct position is a matter of some doubt. According to Westwool and Hewitson, the perfect insect rests with its wings extended horizontally.

The whole group would also appear to be protected, as a large number of the species are mimicked very markedly by Erycides and its allies and also by some species of Pamphilina.

This subfamily is confined entirely to South and Central America.

## Synopsis of Genera of Pyrrholigine.

A. Middle and lower discocellulars of fore wing very oblique.
a. Club of antemee much thickened.
$w^{1}$. Tein 5 of hind wing wanting.
$a^{2}$. Tein 3 of fore wing less than twice as far from 2 as from 4.
$a^{3}$. Vcin 3 of hind wing from before end of cell.
Pyrriofyge, Hb. Trpe, hyperici, Itio. (1)
$\iota^{3}$. Vein 3 of hiisd wing from berond end of cell.
Mrsonis, g. u. Type, acastus, Cramer. (e)
$l^{2}$. Tein 3 of fore wing more than twice as far from 2 as from 4 .
$a^{3}$. Tein 3 of hind wing from before end of cell.
Lavaci,1, g. n. Type, spatioso, Hew. (4)
$b^{3}$. Tcin 3 of hind wing from end of cell.
$u^{\text {i }}$. Cell of hind wing short, not reaching half across wing.
Mimonianes, Hb. Type, iphinous, Latr. (9)

$$
b^{ \pm} \text {. Cell of hind wing long, reaching more than half across wing. }
$$ Asexis †, g. n. Type, pionia, Нет. (3) $c^{3}$. Vein 3 of hind wing from beyond end of cell.

Sarbis, g. n. Type, renthippe, Latr. (6)
$c^{2}$. Vein 3 of fore wing more than three times as far from 2 as from 4.
$a^{3}$. Vein 3 of hind wing from end of cell.
Manoris, g. n. Type, murscia, Swains. (5)
$b^{3}$. Vein 3 of hind wing from before end of cell.
Jemadia, g. n. Type, patrobas, Hew. (8)
$b^{1}$. Vein 5 of hind wing well dereloped.
Ardaris, g. n. Type, cximia, Hew. (1)
3. Club of antennæ comparatively slender.
$a^{1}$. Teins 7 and 8 of fore wing anastomosing shortly.
Jicroceris, g. n. Type, variicolor, Mén. (11)
$h_{1}$. Teins 7 and $S$ of fore wing free.
Mrscelevs, Hb. Type, nobilis, Cran. (12)
B. Middle and lower discocellulars of fore ring almost erect.

Ominetra, Feld, Type, spinithyalina, Feld. (10)

1. Gemins Pyrrhopyge. (Plates I. fig. 2; III. figs. 1 a, l.)

Pyrrhapıge, Hï̈bner, Verz. bek. Schmett. p. 103 (1816).
Type, lyperici, Hübn.
Tamyris, Swainson, Zool. Ill. i. t. 33 (1820-21).
Trpe, zeleucus, Fabr.
Pachyrhopala, Wallengr. K. Vet.-Akad. Fürli. xr. 81 (1858).
Type, phidias, Lim.
Club of antennæ ovoid, very much thickened, bluntly pointed, usually bent into a hook. Fore wing: no costal fold in male bnt costa mnch thickened; cell rather more than two-thirds length of costa; vein 10 nearer to 11 than to 9 ; veins 6 and 7 from upper angle of cell; vein 8 from just before it; upper discocellular minute, middle one about half as long again as lower ; middle and lower discocellulars inwardly oblique, the middle slightly more oblique than the lower and rather better developed; rein 5 nearer to 4 than to 6 ; rein 3 about half as far again from 2 as from end of cell. Hind wing: cell not reaching to the middle of the wing; vein 7 well before upper end of cell, about three times as far from base as from end of cell, rather more remote from base than 2 ; discocellulars almost erect, slightly concare outwardly; vein 5 wanting; vein 3 from just before end of cell; rein 2 almost equidistant from base of wing and from end of cell. Hind wing: outer margin escn or slightly crenulated, produced more or less into an anal lobe, which in some species is well marked though small. Hind tibiæ with two pairs of spurs, the upper pair minute.

| hyperivi, Hüb | 1. | * gazerre, H |
| :---: | :---: | :---: |
| * arethyrea, Hew. ... | $\underline{-2}$ | papius, Hopff. ..... |
| * (ıziza, Hew. ......... | 3. | * charydis, Westw. |
| * gorata, Hew. ......... | $t$. | scylla, Mén. |
| sergius, Hopff. . | 5. | mencerates, Mab. |

[^3]

And three unidentified species.
2. Gemis Mysoria, nov.

Type, acustus, Cramer.
Antennæ as in Pyrrhopyge. Fore wing much more elongate; costa more than half as long again as inner margin; cell almost three-fourths the length of costa. Vein 3 only slightly nearer to end of cell than to vein 2 ; the rest of the nentation much as in Pyorhopyge. Hind wing : cell very short; vein 3 well bevond end of cell, as far heyond as 2 is before it; vein 7 well before end of cell, slightly longer than vein 2. Hind tibiæ with two pairs of spurs.

$$
\begin{aligned}
& \text { acastus, Cramer ......... } 1 . \\
& \text { venczuela, Scudder ....... } 2 \\
& \{\text { barcastus, Sepp. ......... 3. } \\
& \text { \{*verbena, Butler. } \\
& \text { thasus, Cramer ......... } 4 .
\end{aligned}
$$

3. Gemis Amenis, nor.

Type, pionia, Hew.
Antenne as in Pyrrhopyge. Fore wing: as in Pyrrhopyye, but vein 3 given out much nearer the end of the cell, more than twice as far from 2 as from 4 . Hind wing : cell reaching rather beyond the middle of the wing; vein 3 from end of cell, not before it; vein 7 just before end of cell. Hind tibiæ with two pairs of spurs.

* pimia, Hew. ...........
ponina, H.-S. ...........

2. 

In this genus vein 5 of the hind wing is more or less developed, and seems to vary individually ; in the single female that I have seen it was practically absent.

## 4. Genus Yinguna, nov.

Type, spatiosu, Hewitson.
Anteme as in Pyrrhopyge, Fore wing: vein 3 more than twice as far from 2 as from 4. Hind wing: cell not reaching middle of wing; vein 7 rather more than twice as far from base as from end of cell; vein 3 from before end of cell; vein 2 less than twice as
far from base as from end of cell. Hind tibiæ with two pairs of spurs.
$\left\{\begin{array}{ccc|ccc}\text { * spatiosa, Hew. ...... } & 1 . \\ \text { cometes, Cram. } & \ldots . & \varrho . \\ \text { * thelersa, Hew. } & & & \left\{\begin{array}{lll}\text { rubricollis, Sepp } & . . & 3 . \\ \text { * hadora, Hew. } & & \\ \text { arinas, Oram. } & . . . . & 4 . \\ \text { * pellaia, Hew. }\end{array}\right.\end{array}\right.$

## 5. Genus Mahotis, nov.

## Type, nurscia, Swainson.

Antennæ as in Pyrrhopyge. Fore wing: veins 6, 7, and 8 from upper angle of cell; middle discocellular very oblique, lower discocellular slightly arched; vein 3 three times as far from 2 as from 4. Hind wing: cell reaching slightly beyoud the middle of the wing ; vein 7 well before end of cell; discocellulars distinct; vein 5 wanting; rein 3 from end of cell; rein 7 shorter than 2. Hind tibie with only the terminal pair of spurs.

$$
\begin{aligned}
& \text { nurscia, Swainson ...... } 1 . \\
& \text { cridu, Hew. .............. }
\end{aligned}
$$

## 6. Gemus Sarbia, nov.

Type, sauthippe, Latreille.
Antenuæ as in Pyrrhopyye ; palpi also similar, but the third joint even less prominent than in that genus, being almost entirely concealed by the scales of the second joint. Fore wing: much as in Pyrrhopyge, but vein 3 more than twice as far from 2 as from 4. Hind wing: cell very short, reaching to considerably less than half across wing ; vein 3 far beyond end of cell, only about half as long as rein 2; vein 2 alnost equidistant from base of wing and end of cell; vein 7 well before end of cell, more than three times as far from base of wing as from rein 6 . Hind tibie with two pairs of spurs.

$$
\begin{aligned}
& \text { aunthippe, Latr. ...... } 1 . \\
& \text { spixi, Plötz ............ } 1 \text { n. } \\
& \text { antias, Feld. ............. } 2 . \\
& \text { * oneka, Hew. ............ : }
\end{aligned}
$$

And one unidentified species.

## 7. Genus Ardaris, hov. (Plate I. fig. 1.)

Type, eximia, Hew.
Antenuæ as in Pyrrhopyge. Fore wing: middle and lower discocellulars subequal, inwardly oblique and in the same straight line; rein 2 remote from base of wing, about equidistant from vein 3 and base of wing ; vein 3 twice as far from 2 as from end of cell. Hind wing: vein 7 well before end of cell; discocellulars distinct; vein 5 from their middle; vein 3 from end of cell; vein 2 rather nearer to end of cell than to base of wing. Hind tibiz with only the terminal pair of spurs.

## 8. Genus Jemadia, nov.

Type, hospita, Butler.
Antenuæ as in Pyrrhopyge. Fore wing: vein 3 more than thrce times as far from 2 as from end of cell, rest of neuration as in Pyrrhopuge. Hind wing: cell reaching beyond the middle of the wing; vein 7 about three times as far from base as from end of cell; vein 3 before end of cell; veill 2 twice as far from base as from rein 3. Hind wing produced into a distinct lobe at submedian. Hind tibie with two pairs of spurs.

| * hospita, Butl. | 1. | * pasecus, Hew. |
| :---: | :---: | :---: |
| $\{$ gnetus, Fabr. .... | $\because$ | jamina, Butl. |
| \{ vulcanve, Cramer. |  | * zimrra, Hewr. |
| * hewitsonii, Mab. | 3. | * ahira, Неw. |
| * patrobas, Hew. | 4. | * zonara, Herr. |
| azcta, He | 5. |  |

## 9. Genus Mimoniades.

Mimoniudes, Hübn. Zutr. ii. 27 (1823). Type, iphinous, Latreille.
Autemex and palpi as in Pyrrhopyge. Fore wing: vein 2 from close to base of wings; vein 3 rather more than twice as far from 2 as from end of cell. ITind wing : outer margin slightly crenulate; vein 7 just before end of cell; discocellulars outwardly concave; reiu 3 from end of cell; rein 2 nearer end of cell than base of wing. Hind tibiæ with two pairs of spurs.

| $\left\{\begin{array}{lll}\text { iphinous, Latr. ......... } & 1 . \\ \text { ocyalus, Hübn. } & \\ \text { cersicolor, Latr. } & \text {...... } & 2 . \\ \text { mulcifer, Hübu. } \\ \text { cupheme, G. \& S. ...... } & 3 . \\ \text { * pityusa, Herr. ........ } & 4 .\end{array}\right.$ | minthe, G. \& S. <br> * sela, Hew. <br> * periphema, Hew. $\qquad$ <br> * picria, Неш. <br> * machaon, Hew. ...... |
| :---: | :---: |

The last two species are probably not congeneric with iphinous nor even with each other, but seem less out of place here than in auy other described genus.

## 10. Genus Oxynetra.

Oxynetra, Felder, Wien. ent. Mon. vi. p. 179 (1862).
Type, semihyalina, Felder.
? Dis, Mabille, Bull. Soc. Ent. Fr. (6) rol. ix. p. clexxiv (1889). Type, annulatus, Mabille.
Club of antennæ more pointed than in Pyprhopyge. Fore wing: middle and lower discocellulars almost erect, the middle one the longer ; vein 5 slightly nearer 4 than to 6 ; vein 2 twice as far from 3 as from base of wing; vein 3 only slightly further from 2 than from end of cell. Hind wing: cell reaching to two-thirds length of wing; rein 7 well before end of cell, nearer to margin than to base of wing ; vein 5 wanting ; vein 3 from beyond end of cell; rein 2 from well before end of cell, considerably nearer to margin than to base of wing.

Male with a tuft of hairs ou upperside of hind wing at base of submedian nervure.

$$
\begin{aligned}
& \text { scminyalina, Felder ................ } 1 . \\
& \text { folderi, Hopff. } \\
& \text { f.................. }
\end{aligned}
$$

Messrs. Godman and Salvin consider the anmulatus of Mabillc to be in all probability the female of a species of Oxynetra.

## 11. Genas Microceris, nov. (Plate I. fig. 3.)

Type, variicolor, Mén.
Antenuæ: club rather more pointed than in Py yrrhopyge. Palpi as in Pyrrhopyge. Middle and lower discocellulars subequal, inwardly oblique; veins 7 and 8 stalked, i.e. anastomosing, for a short portion of their length; rein 3 abont twice as far from 2 as from 4. Hind wing: outer margin crenulated; vein 7 just before cud of cell ; vein 5 wanting; rein 3 from end of cell ; vein 2 considerably nearer to end of cell than to base of wing. Fore tibix very short. Hind tibia with two pairs of spurs.
étriicolor, Mén. ...................... 1.

## 12. Gemus Mrscelus.

Myscelus, Hübner, Verz, bek. Schmett. p. 110 (1816).
Type, nobilis, Cramer.
Antennæ hooked, ending in a blunt point; club comparatively slender, only about twice as thick as shaft. Outer margin slightly longer than inmer margin. Cell reaching to more than two-thirds the length of costa. Discocellulars very oblique in the same straight line. Vein 5 nearer to 4 than to 6 . Vein 3 from just before end of cell, more than twice as far from 2 as from end of cell. Hind wing very crenulate, rather squared at anal angle. Hind tibio with two pairs of spurs, both tibiæ and femora being densely fringed on their inner edge.

| nobilis, Cramer............ 1. | cpimachie, H.-S. ......... 5. |
| :---: | :---: |
| *amystis, Нerr. ........... 2. | santhilarius, Latr. ...... 6. |
| *athrus, Неш............... 3. | pardalina, Feld. ........ 7. |
| *phoronis, Нew............ 4. | assuricus, Cram, ......... 8. |

## Subfamily II. Hesperifne. Section A.

Antennæ: elub usually beut into a hook, but sometimes sickle= shaped, always terminating in a fine point. Third joint of palpi either minute, or else porrected horizontally in front of the face, as in section C of the Pamphiline, never curving over the vertex. Cell of fore wing always more than two thirds the length of costa. Discocellulars geuerally very oblique. Vein 5 slightly nearer either to 4 or to 6 , never conspicuously close to either. Hind wing frequently with a tail or tooth at submedian. Vein 5 never fully developed except in a few Old-W orld genera.

The length of the cell of the fore wing will serve to separate this section.

Little is known of the habits of this section, and, of those of which there is any record, some seem to rest with their wings over their backs, and some with them extended flat.

This section is confined almost entirely to the New World; only seven of the genera occur in the Old World, and these are only represented by one or two species each.

The male is usually provided with a costal fold on the fore wing and never with a discal stigma, occasionally with a tuft on one of the wings, and rery frequeatly with a tuft of long hairs attached to the hind tibix, which are usually, but not invariably, furnished with two pairs of spurs. The epiphysis on the fore tibie is invariably present.

## Seciion B.

Antemm seldom hooked, occasionally bluntly pointed. Palpi, third joint either minute or porrected in front of the face, in the latter case stout, and not slender as in the Entheus group in Section A; palpi never curving over the vertex.
Fore wing: cell less than two-thirds the length of costa; vein 5 invariably nearer to 6 than to 4 . Hiud wing frequently lobate, but never with a distinct tail or tooth at the submedian; vein 5 never fully developed.

This section can be readily separated by the position of rein 5 of the fore wing together with the short cell.

All the species of this group of which there is any record (with the exception of a few species of Hesperia) rest with their wings extended flat when in a state of complete repose, frequently settling on the underside of a leaf.

This section occurs throughout both-the New and the Old Worlds, some of the genera having a very wide range. Most of the NewWorld forms and a few of the Old-World ones are provided in the male with a costal fold on the fore wing, and never with a discal stigma. A very large number of the genera are also provided in the male with a tuft of long hairs attached to the hind tibix or fore coxæ. There are invariably two pairs of spurs on the hind tibio, and the epiphysis of the fore tibio is invariably present, with the doubtful exception of some individuals of Abantis tettensis.

## Synopsis of Genera of Hesperines.

## Section A.

a. Hincl tibie with two pairs of spurs (except in Tarsoctenus * and Casyapa*).
$a^{1}$. Third joint of palpi minute, bluntly conical.
$a^{2}$. Hind wing conspicuously, tailed at vein $1 b$.
$a^{3}$. Male with a tuft of hairs on underside of fore wing.
Polytirix, g. n. Type, metallescens, Mab. (1)
$b^{3}$. No tuft of hairs on underside of fore wing in male.
Eddanus, Swains. Type, proters, Linu. (2)

[^4]$b^{2}$. Hind wing with no tail, but with a projecting tooth at vein 16 .
$a^{3}$. Antennæ sickle-shaped. Plestri, Mab. Trpe, staudingeri, Mab. (4)
$b^{3}$. Antennax more or less hooked (except in some species of Hetcropia).
$a^{\prime}$. Hind tibix with only terminal pair of spurs.
Tarsoctenes, g. n. Type, plutia, Hew. (5)
$b^{\prime}$. Hind tibie with both pairs of spurs.
( $a^{\prime}$. Lower discocellular of fore wing strongly arched.
Phocides, ILiibu. Type, paleizon, Crau. (i)
$b^{5}$. Lower discocellular of fore wing straight.
${ }^{6}$. Male with a tuft of hairs on underside of fore ming.
Hypocriptotimir, g. n. Type, teutas, Hew. (i)
$b^{4}$. No tuft of hairs on underside of fore wing in male.
$a^{i}$. No tuft of hairs on upperside of hind ring in male.
$a^{y}$. Apex of fore wing truncate, the outer margin angled at vein 5 .
$a^{9}$. Male with a costal fold on fore wing.
$a^{10}$. Vein 3 of hind wing immediately before the end of cell.

Seathilepis, Butl. Type, clonizs, Cram. (!) $b^{10}$. Vein 3 of hind wing well before end of cell.

Eparayeecs, Hiibu. Type, tityrus, Fabr. (10) $b^{3}$. No costal fold on fore tring of male.

Proteldes, Miibu. Type, idas, Crain. (11)
$h$. The apex of fore wing not truncate, outer margin not angled at rein 5 .
$a^{3}$. Hind tarsi set below with two scries of very conspicuous closely set spines.

Cinisoplectrus, g. n. Type, otriades, Hew. (1:)
$b^{3}$. No conspicuous rows of spines on hind tarsi. $a^{10}$. No costal fold on fore wing of male.
$a^{11}$. Vein 2 of fore wing almost equidistant from 3 and from the base of tring.

Heterofl., g. 1, Type, imitatrix, Mab. (8)
$b^{13}$. Vein $\cong$ of fore wing twice as far from 3 as from base of wing.
$r^{12}$. Antenna: club abruptly robust, crook very slender, considerably shorter than rest of club.

Acolastus, Sc. Type, savignyi, Latr. (13)
$b^{12}$. Antenne: club very gradually thickened and gradually tapering, crook as long as or longer than the rest of the club. Telegones, Hübn. Type, anaphus, Cram. (14) $b^{10}$. Male with a costal fold on fore wing. $a^{11}$. Vein 2 of hind wing far before end of cell.
$a^{12}$. Terminal portion of club of antemm only slightly or not at all longer than rest of club.
$a^{13}$. Outer margin of fore wing in male only slightly or not at all longer than inner: margin.
$a^{{ }^{24}}$. Third joint of palpi horizontal.
$a^{15}$. Vein 3 of hind wing from before end of cell.
$a^{16}$. Tooth on hind wing very conspicuous.
Goniurus, Hübn. Type, calus, Cram. (3) $b^{16}$. Tooth on hind wing inconspi-
cuous.
Thymele, Fabr. Type, mercatus, Fabr. (15)
Proc. Zool. Soc.- 1893 , No. II.
$b^{15}$. Vein 3 of hind wing from end of cell.
Telemades, Hübn. TYpe, avitus, Cram. (16)
$b^{14}$. Third joint of palpi erect.
Drscorncs, Burn. Type, scbaldus, Oranı. (17)
$b^{13}$. Outer margin of fore wing in male very
much longer than inner margin. Nascts, g. n. Type, phocus, Cram. (18)
$b^{12}$. Terminal portion of club of antennæ more than twice the length of remainder of club.
Buxgalotis, g. il. Type, midas, Cram. (19)
$b^{11}$. Vein 2 of hind wing close to end of cell.
Drepilalys, g. u. Type, helixus, Hewr. (32)
$b^{\overline{1}}$. Male with a tuft of hairs on upperside of hind wing.
$a^{8}$. Apex of fore wing acute.
$a^{9}$. Vein 3 of hind wing from before end of cell.
Typhedasus, Butl. Type, acphus, Butl. (33)
$b^{9}$. Vein 3 of hind wing from end of cell.
Porpiyrogenes, g. n. Type, omplate, Butl. (35)
$b^{5}$. Apex of fore wing truncate.
Eemypres, g. 11. Type, chersis, H.-S. (34)
$c^{2}$. No tail or projecting tooth on hind wing at vein $1 b$.
$a^{3}$. Vein 5 of hind wing fully developed.
$a^{4}$. Male with a costal fold on fore wing.
$a^{5}$. Hind tibix with one pair of spurs.
Casyafa, Kirby. Type, corcus, Feld. (21)
$b^{5}$. Hind tibie with two pairs of spurs.
Pteroxys, g. n. Type, phanceus, Hew. (20)
$b^{4}$. No costal fold on fore wing of male.
$a^{5}$. Antennal club very robust.
Picricops, g. 1. Type, beata, Hew. (2シ)
$7^{5}$. Antennal club comparatively slender.
$a^{6}$. Male : outer margin of fore wing longer than inner margin. ...... Oaplla, MLoore. Tspe, jayadeva, Moore. (23)
$b^{6}$. Male: inner margin of fore wing longer than outer margin.
$a^{7}$. Male with a tuft of hairs on hind tibix.
Calliafa, Moore. Tspe, pieridoides, Moore. (24)
$h^{7}$. No tuft of hairs on hind tibix of the male.
Pisola, Moore. Type, zennara, Moure. (2j̄)
$b^{3}$. Fein 5 of hind wing wanting (i.e not cleveloped into a tubular vein).
$a^{4}$. Antennal club more or less hooked.
$a^{5}$. No tuft of hairs on hind tibix of the male,
$a^{6}$. Vein 3 of hind wing from the end of cell.
Cecropterus, H.-S. Type, zurex, Hübu. (26)
$h^{6}$. Vein 3 of hind wing from before end of cell.
$a^{7}$. Hind wing rounded.
$a^{3}$. Male with a tuft of radiating hairs on upperside of hind wing. Cogr., Butler. Type, hassan, Butl. (27)
$b$. No tuft of radiating hairs on upperside of hind wing in the male.
$a^{3}$. Middle and lower discocellulars of fore wing suberect. Ephyriades, Hübn. Type, otreus, Cram. (28)
$l^{9}$. Jiddle and lower discocellulars of fore wing oblique.
$a^{10}$. Hind wing produced in the subcostal area, distance from origin of rein 8 to extremity of
1 rein 6 greater than the length of rein $1 b$.
T'погчвеs, Sc. Type, bathyllus, Sm.-Abb. (29)
$b^{10}$. Hind ring produced in the submedian area.
Fein $1 b$ longer than the distance from the origin of rein 8 to the extremity of vein 6 .
$a^{11}$. Male with a costal fold on fore wing.
Achalarts, Sc. Type, lycidas, Sm.-Abb. (30)
$b^{11}$. No costal fold on fore wing of male.
Ruabdoides, Sc. Type, ecllus, Boisd. (31)
$b^{7}$. Hind wing elongate.
Murgaris, g. n. Type, albocilicutus, Mab. (39)
13 . Male with a tuft of hairs on hind tibir.
$a^{3}$. Tein 3 of hind wing well before end of cell.
Ethilla, Hew. Type, eleusinia, Hew. (40)
$b^{6}$. Vein $\ddot{3}$ of hind wing immediately before end of cell.
Hastani, Moore. Type, informus, Feld. (38)
$h^{4}$. Club of antenna sickle-shaped.
a'. Male mith a costal fold on fore wing, and a luft of hairs near base of hind wing on upperside.
C.ecini, Hew. Type, calathana, Hew. (36)
$h$. Male with no costal fold on fure wing, but with a tuft of hair at base of abdominal fold on underside of hind wing.

Ablep-1s, g. n. Trpe, culpinus, IIibb. (37)
$c^{\prime}$. Antemal club angled, not houked or sickle-shaperl.
Ancistrochmpt.1, Feld. Type, hiarbas, Cram. (41)
b. Palpi porrect, divergent; third joint long, slender, naked.
$a^{2}$. Outer margin of hind ming crenulated.
Hydrexoma, Butl. Type, orcinus, Feld. (42)
$b^{2}$. Outer margin of hind wing eren.
$a^{3}$. Hind wing much elongated.
Paridros, g. n. Type, phoence, Herr. (43
$b^{3}$. Hind wing not elongated, but with a distinct anal lobe.
$a^{4}$. Vein 3 of hind wing from befure end of cell.
Lig.yostola, Mab. Type, pemphigargyra, Mab. (44)
$b^{4}$. Vein 3 of hind wing from end of cell.
Pranes, Hübu. Type, vitrcus, Cram. (45)
b. Hind tibiz only with terminal pair of spurs.
$a^{2}$. Palpi porrect, divergent ; third joint long, slender, naked.
$a^{2}$. Male with a costal fold on fore wing.
Mralotiyrus, Mab. Type, nitocris, Crain. (46) $b^{2}$. No costal fold on fore wing of male.

Extiees, Hübn. Type, peleus, Lim. (47)
$b^{1}$. Palpi, third joint minute, bluntly conical.
$a^{2}$. Hind wing not elongated,
Cabirus, Hïbn. Type, julcttus, Stoll. (48)
$b^{2}$. Hind wing rery conspicuously elongated.
Grynopsis, g. n. Type, calcestc. Westr. (49)

## 1. Genus Polythrix, nov.

Type, metallescens, Mabille.
Neuration and antennæ as in Eudamus. Differs in having in the male a tuft of hair at the base of the submedian on the underside of the fore wing, and in the costa of the hind wing being strongly arched at base.

$$
\text { metallescens, Mab. ............ } 1 .
$$

The characters separating this genus from Eudamus being entirely of a sexual character, it would probably be more correct to regard it as a subgenus of Eudamus.

South American only.

## 2. Genus Eudamus. (Plate III. fig. 3.)

Eudumus, Swainson, Ill. ii. p. 48 (1832-33).
Type, proteus, Linnæus.
Anteunæ : club bent into a hook just beyond the thickest part and tapering to a fine point.
Male with a costal fold except in eurycles and orion.
Cell of fore wing rery long; discocellulars inwardly oblique and in the same straight line, upper discocellulars reduced to a point ; vein 9 equidistant from 8 and 10; vein 5 rather nearer to 4 than to 6 ; vein 2 from near base of wing; rein 3 more than twice as far from 2 as from 4; lower branch of veinlet in cell just before rein 4. Hind wing produced into a tail of varying length; veiu 5 wanting; discocellulars hardly traceable; veiu 3 just before end of cell; vein 2 nearer to 3 than to 1 ; vein 7 well before end of cell.


And eight unidentified species.
Habitat. Tropical America.

## 3. Genus Goniurus.

Goniurus, IIübner, Verz. p. 104 (1816). Type, ccelus, Cramer.
Antennæ: club rather slender, bent into a hook, the terminal portion about as long as rest of club. Palpi: second joint densely scaled ; third joint short, porrect, obtusely conical. Fore wing : iuner and outer margins subequal ; male with a costal fold; cell more than two-thirds the length of costa; discocellulars very oblique, the middle one slightly the longer ; rein 3 shortly before the cud of cell; vein 2 close to base of wing. Hind wing with a very conspicuous tooth or short tail at vein $1 b$; vein 7 shortly before the end of cell; discocellulars and rein 5 barely traceable; vein 3 immediately before the end of cell; rein 2 slightly nearer to end of ccll than to base of wing. Hind tibiæ fringed, and with two pairs of spars.

$$
\left\{\begin{array}{c}
\text { calus, Cram. } \\
\text { *aurunce, Her. }
\end{array}\right.
$$

Habitat. South America.

## 4. Genus Plestla. (Plate III. fig. 4.)

Plestia, Mabille, Le Naturaliste, p. 146 (1888).
Type, staudingeri, Mab.
Antennæ: club rather flattened, sickle-shaped, the thickening and tapering very gradual, terminating in a fine joint. Fore wing: male with a costal fold; cell more than two thirds length of fore wing; upper discocellular minute; middle and lower discocellulars inwardly oblique, the middle the longer; vein 9 equidistant from 8 and 10 ; vein 2 from near base of ring; vein 3 about four times as far from 2 as from 4 ; rein 5 nearer 6 than 4. Hind wing produced into a short tail; rein 5 wanting; discocellulars barely traceable; vein 3 from just before end of cell; vein 2 rather nearer to 3 than to base of wing.

$$
\text { dorus, Edmards ......... } 1 .
$$

Hatitat. The Mexican subregion.
5. Genus Tarsoctenus, nov. (Plates I. fig. 6 ; II. fig. 13.)

Type, plutiu, Hewitson.
Allied to Phocides.
Antenıæ : club moderate, with a slender terminal hook. Palpí: second joint densely scaled; third joint naked, more prominent than in Phocides. Fore wing: male with costal fold ; cell considerably more than two-thirds length of costa; discocellulars slightly oblique, middle slightly longer than lower; upper discocellular very short; vein 3 about lialf as far again from 2 as from 4; vein 2 nearer to base of wing than to rein 3 . Hind wing with a distinct lobe at end of vein $1 b$; vein 7 well before end of cell ; discocellulars very faint, slightly ontwardly oblique; vein 5 barely traceable; vein 3 rather nearer to end of cell than to rein 2 ; vein 2 almost equidistant from base of wing and from end of cell. Hind tibix in both sexes very short, with only a terminal pair of spurs. In the male one of these spurs is much produced, and the proximal end of the tarsus bears beneath on either side a comb of yellowish bristles which, when the tarsus is straightened out, enclose the lengthened spur. This character is less developed in papias than in the other species of the genus.

$$
\begin{aligned}
& \left\{\begin{array}{l}
\text { plutia, Hew. ......... } \\
\left\{\begin{array}{l}
\text { corytas, Clam......... } \\
\text { pyrainus, Cram. } \\
\text { pracia, Mew. ....... }
\end{array}\right. \\
\text { * papias, Hew. ........ }
\end{array} .\right.
\end{aligned}
$$

One species, gaudialis, Hew., also belongs to this genus, but it is not in the British Museum.

Confined to tropical America.
6. Genus Phocides. (Plates I. fig. 5 ; III. fig. 2.)

Phocides, Hübn Verz. p. 103 (1816). Type, palemon, Cramer.
Erycides, Hübn. Verz. p. 110 (1816). Type, pigmalion, Cramer.
Dysenius, Sc. Syst. Rev. p. 46 (1872). Type, albicilla, H.-S.
Antennæ: cluh rather robust, extremity very fine, forming a hook
with remainder of club. Palpi well separated, thickly scaled, forming two square projections in front of the face; third joint hardly visible. Fore wing : male with a costal fold; cell more than two-thirds length of costa; discocellulars very oblique, middle one straight, lower strongly arched and much the longer; rein 3 just before end of cell; rein 2 about twice as far from 3 as from base of wing. Hind wing much elongated; rein 3 immediately before end of cell ; vein 5 wanting. Hind tibir with two pairs of spurs.

This genus is readily recoguized by the unique character of the lower discocellular of the fore wing.


Found throughout tropical America.

## 7. Genus Hypocryptothrix, nov.

## Type, teutas, Hew.

Antennæ: clnb moderately robust, bent into a hook. Fore wing: male with a costal fold ; cell slightly more than two-thirds length of costa; upper discocellular very short, lower and middle discocellulars inwardly oblique, subequal; reinlet in cell at vein 4 ; vein 3 close to end of cell, about four times as far from 2 as from 4. Hind wing slightly lobate; vein 8 arched at base, then bent abruptly, sinuated for its terminal three fourths, and approaching very close to vein 7 ; vein 7 from close to the base of wing; discocellulars very faint, strongly outwardly oblique; vein 5 wanting; vein 3 from end of cell; vein 2 nearer to end of cell than to base of wing. Hind tibiæ with two pairs of spurs.

Male with a tuft of hair on underside of fore wing at base of submedian. Allied to Tapsoctenus.

* teutas, Herr $\qquad$
Confined to tropical South America.


## 8. Genus Heteropia.

Heteropia, Mabille, Le Naturaliste, p. 68 (1889).
Type, imilutrix, Mabille.
Antennæ: club moderate, gradually thickened and gradually tapering to a fine point, bent into a hook. Palpi as in Thymele. Fore wing: cell just two-thirds length of costa; reinlet in cell at vein 4; no costal fold in male ; upper discocellular very short, middle and lower discocellulars inwardly oblique, subequal; vein 3 close to end of cell, twice as far from 2 as from 4 ; vein 2 well removed from base of wing, only slightly nearer to base than to vein 3. Hind wing slightly angled at vein $1 b$; cell moderate, vein 7 more than twice as far from base as from end of cell; vein 3 from end of
cell; vein 2 slightly nearer to end of cell than to base of wing. Hind tibiæ with two pairs of spurs.
$\left\{\begin{array}{l}\text { imalena, Butl. ......... } \\ \text { imitatrix, Mab. } \\ \text { * bryaxis, Her. }\end{array}\right.$

And two unidentified species.
Confined to Central and South America.

## 9. Genus Spathilepia.

Spathilepia, Butler, Ent. Mon. Mag. vii. p. 57 (1870).
Type, clonius, Craner.
Antemæ: club moderate, very gradually thickened, bent into a hook, the terminal portion not quite as long as rest of club. Palpi porrect, second joint densely scaled, third joint short. Fore wing : outer margin longer than inner margin ; outer margin angled at rein 5, the upper portion almost at right angles to costa, the lower portion rumning obliquely to outer angle ; male with a costal fold ; cell more than two-thirds the length of costa; vein 12 reaching costa before end of cell; upper discocellular minute; middle and lower discocellulars inwardly oblique, the middle one about twice as long as lower one; vein 3 three times as far from base as from end of cell; vein 2 three times as far from end of cell as from base of wing. Hiud wing tonthed at vein $1 b$; vein 7 three times as far from 8 as from 6 ; discocellulars faint, almost erect; vein 5 wanting; vein 3 just befure end of cell; rein 2 slightly nearer to end of cell than to base of wing. Hind tibiæ thickly friuged and with two pairs of spurs.
clonius, Cram. ......... 1 ,
Inhabits Central and South America.

## 10. Genus Epargyikeus. (Plate I. fig. 4.)

Epargyreus, Hübuer, Verz. p. 10.5 (1816). Type, tityrus, Fabr. Eparyijreus, Sculder, Butt. N. Engl. rol. ii. p. 1399 (1889). Type, tityrus, Fibr.
Antenne: rather more robust than in Thymele, otherwise very similar. Palpi densely scaled, third joint almost entirely concealed by the scales of the second joint. Fore wing: male with a costal fold ; cell more than two-thirds length of costa; veinlet in cell from just behind vein 3 ; vein 12 reaching costa well before end of cell; upper discocellular minute, middle and lower discocellulars in wardly oblique and in the same straight line; vein 3 less than twice as far from 2 as from end of cell; vein 2 more than twice as far from 3 as from base of wing. Hind wing prominently toothed at vein $1 b$; vein 7 more than twice as far from base of wing as from end of cell; discocellulars hardly traceable, slightly outwardly oblique; vein 5 wanting; vein 3 well before end of cell, about twice as far from 2 as from 4 ; vein 2 slightly further from end of cell than from base of wing. Hind tibiæ with two pairs of spurs.

This genus is closely allied to Proteides, from which it differs
chiefly in the less truncate apex to the fore wing, and the slightly different relative positions of the median branches. The male also is provided with a costal fold, which is wanting in Proteides.

| $\left\{\begin{array}{l}\text { tityrus, Fabr } \\ \text { clarus, Cram }\end{array}\right.$ psendexadeu |
| :---: |
|  |  |
|  |  |
|  |  |



And two unidentified species.
American and West Indian.

## 11. Genus Proteides.

| Proteides, Hübner, Verz. p. 105 (1816). | Type, idas, Cramer. |
| :--- | :--- |
| Dicranaspis, Mabille, Amn. Soc. Eut. Belge, |  |
| xxi. p. 24 (1878). |  |
| Type, idas, Cramer. |  |

Antennæ: club abruptly thickened, very robust, bent into a hook, terminal portion short and gradually tapering. Fore wing: no costal fold in male; cell very long, almost three-fourths length of costa; vein 12 reaching costa before the end of cell; vein 10 nearer to 9 than to 11 ; rein 9 nearer to 8 than to 10 ; upper discocellular minute, middle and lower discocellutars inwardly oblique; vein 5 considerably nearer to 4 than to 6 ; vein 3 slightly nearer to end of cell than to rein 2 ; vein 2 less than twice as far from rein 3 as from base of wing. Fore wing much produced at apex, costa about one and a half times the length of inner margin ; outer margin at almost a right angle with costa from apex to vein 5 , then very oblique to outer angle. Hind wing prominently toothed at submedian ; cell moderate; vein 7 well before end of cell; discocellulars very faint; vein 5 wanting; vein 3 well before end of cell; vein 2 nearer to end of cell than to base of wing, and twice as far from 3 as 3 is from 4. Hind tibire with two pairs of spurs.

$$
\text { idas, Cramer .............. } 1 .
$$

And two unidentified species.
Confined to tropical America and the West Indies.

## 12. Genus Chrysoplectrum, hor. (Plate II. fig. 15.)

Type, otriades, Hewitson.
Antennæ: club moderate, bent into a hook, terminal portion very slender, rather more than half as long as remainder of club. Terminal joint of palpi minute, obtusely conical. Fore wing : outer margin considerably longer than inner margin; male with a costal fold ; cell scarcely two-thirds length of costa; vein 12 reaching costa before the end of cell ; upper discocellular minute, middle discocellular inwardly oblique, lower almost erect, the middle one the longer; vein 3 more than three times as far from base of wing as from end of cell, twice as far from vein 2 as from 4; veinlet in cell from just before vein 4. Hind wing strongly arched at base, rather
elongated ; outer margin almost straight in male, slightly more convex in female; a tooth-like lobe at anal angle; vein 7 more than twice as far from 8 as from 6 ; discocellulars erect; vein 3 from end of cell; vein 2 twice as far from base of wing as from end of cell. Hind tibiæ with a long fringe and two pairs of spurs, the terminal pair very long. On the hind tarsi of the male below there are two series of densely set golden spines.
*otriudes, Hew. ......... 1.
And two umnamed species.
Confined to South America.

## 13. Genus Acolastus.

Polygonus, Hiibner, Exot. Schmett. ii. (1822).
Type, amyntas, Fabr. (nom. preocc.).
Acolastus, Scudder, Syst. Rev. p. 50 (1872). Type, savignyi, Latr.
Antennre: club moderate, bent into a hook, terminal portion very slender, rather more than half as long as remainder of club; terminal joint of palpi minute, conical. Fore wing: outer and inner margins subequal, no costal fold in male; cell considerably more than two-thirds length of costa; upper discocellular short ; middle and lower discocellulars subequal, inwardly oblique, and in the same straight line; vein 12 reaching costa well before the end of cell; vein 3 remote from end of cell, twice as far from base of wing as from end of cell; vein 2 more than twice as far from end of cell as from base of wing ; veinlet beyond rein 3, median slightly ang!ed where it ineets it. Hind wing : costa strongly arched at base, outer margin rounded, a conspicuous tooth-like lobe at anal angle; vein 7 twice as far from 8 as from 6 ; discocellulars almost erect; vein 5 wanting ; veins 3 and 2 both from shortly before end of cell; vein 3 nearer to 4 than to 2 ; vein 2 considerably further from base of wing than from end of cell. Hind tibix fringed, and with two pairs of spurs.

$$
\left\{\begin{array}{l}
\text { amyntas, Fabr: } \\
\text { lividus, Hübn. } \\
\text { savignyi, Latr: }
\end{array}\right.
$$

This genus appears to be closely allied to Proteides.
Habitat. South America and West Indies.

## 14. Genis Telegonus.

Telegonus, Hïbner. Verz. bek. Schmett. ן. 10t (1816).
Type, anaphus, Cramer.
Antemm: thickening of club slight and very gradual ; club bent usually at about a right angle, occasionally to less, the terminal portion about as long as rest of club. Palpi : second joint densely scaled, third joint minute. Fore wing : onter margin much longer than imner margin ; cell just over two-thirds the length of costa; no costal fold in male; vein 12 reaching costa well before the end of
cell; upper discocellular minute, middle and lower discocellulars oblique in the same straight line, the upper slightly the longer; vein 3 rather more than twice as far from base of wing as from end of cell; vein 2 about three times as far from end of cell as from base of wing; veinlet in cell shortly before vein 4. Hind wing produced into a lobe at anal angle, outer margin evenly rounded; vein 7 well before end of cell, slightly nearer to 6 than to 8 ; discocellulars very faint, almost erect; vein 5 wanting; vein 3 just before end of cell; vein 2 rather nearer to end of cell than to base of wing. Hind tibiex fringed, and with two pairs of spurs.

Closely allied to Thymele, differs from it slightly in neuration and in the absence of the costal fold on the fore wing of the male.


And four unidentified species.
Confined to tropical America.

## 15. Genus Thymele.

Thymele, Fabr. III. Mag. vi. p. 287(1807). Type, mercatus, Fabr. Astraptes, Hübner, Verz. p. 103 (1816). Type, aulestes, Cramer. Euthymele, Mabille, Ann. Soc. Ent. Belge, xxi. p. 24 (1878).

Type not specified.
Antennæ; club slender, gradually thickened and gradually tapering to a fine point, abrintly bent into a hook just beyond its thickest portion. Palpi well separated, third joint minute. Fore wing : male with a costal fold ; cell two-thirds length of costa; veinlet in cell just before vein 4 ; vein 12 reaching costa well before end of cell ; upper discocellular minute, lower and middle discocellulars subequal, inwardly oblique, and in the same straight line; vein 3 rather more than twice as far from 2 as from end of cell; vein 2 about one and a half times as far from 3 as from base of wing. Hind wing much produced in sabmedian area and slightly toothed at submedian nervule; cell short, not reaching half across wing; vein 4 much longer than the lower margin of the cell; vein 7 rather nearer to cnd of cell than to base of wing; discocellulars barely traceable, almost erect; vein 5 wanting; vein 3 from mmediately hefore end of cell ; vein 2 nearer to end of cell than to base of wing. Hind tibio thickly fringed and with two pairs of spurs.

Of the four species included by M. Mabille in his gemus Euthymele, two belong to Thymele and two to Telegonus.

| fulgerator, Walch. ...... 1 |  | colossus, H.-S. |  |
| :---: | :---: | :---: | :---: |
| mercatus, Fabr. |  | cgregize, Butl. |  |
| *naxos, Hew. ........... |  | cnotrus, Cram. |  |
| aulestes, Cram. ......... 3 | 3. | *halesins, Hew. | 7. |

Confined to tropical America.

## 16. Genus Telemiades.

Telemiades, Hübner, Verz. p. 106 (1816). Type, avitus, Cramer.
Antenne: club moderate, strongly hooked, terminal portion very slender and slightly shorter than remainder of the club. Palpi: second joint densely scaled, third joint short and obtuse. Fore wing: inner and outer margins subequal; male with a costal fold ; cell two-thirds length of costa; vein 12 reaching costa before end of cell; upper discocellular minute; middle and lower discocellular inwardly oblique, the lower the longer ; vein 3 closc to end of cell, three times as far from hase of wing as from end of cell; vein " uearer to base of wing than to vein 3 . Hind wing evenly rounded, rather produced at anal angle; rein 7 about three times as far from base of wing as from end of cell ; discocellulara and vein 5 barely traceable; vein 3 from end of cell; vein 2 about twice as far from base of wing as from end of cell. Hind tibiee with two pairs of spurs, upper pair minute.

$$
\begin{aligned}
& \text { avitus, Cramer ............... } 1 . \\
& \text { *phasics, Hew. ............... } \\
& \text { *penidas, Hew. ............... } 3 . \\
& \text { *azincs, Hew. ............... } 4 . \\
& \text { amplion, Hübn. ............ } 5 .
\end{aligned}
$$

Confined to South America.

## 17. Genus Dyscophus. (Plate III. fig. 8.)

Dyscophus, Burmeister, Descr. Rep. Arg. v. p. 291 (1878).
Type, sebaldus, Cramer.
Antennæ: club moderate, hooked, terminal portion very fine, as long as rest of club. Fore wing : male with a costal fold ; cell more than two-thirds length of costa; outer margin longer than inner margin ; outer end of cell oval; upper discocellular short but distinct, outwardly oblique; middle discocellular erect; lower discocellular inwardly oblique, longer than the middle one; veinlet just before vein 4 ; vein 4 opposite vein 8; vein 12 reaching costa before end of cell; vein 3 about half as far again from 2 as from 4 ; vein 2 nearer to base of wing than to vein 3 . Hind wing producel in submedian area; outer margin angled at vein 2 and again at vein $1 b$; vein 7 well before end of cell, more than twice as far from vein 8 as from 6; upper discocellular straight, lower slightly outwardly oblique; vein 5 wanting; vein 3 just before end of cell; vein 2 more than twice as far from base of wing as from end of cell. Hind tibire densely fringed and with two pairs of spurs.

| $\begin{aligned} & \text { sebaldus, Cram. ............. } \\ & \text { crameri, Latr. } \\ & \text { *dorisous, Hew. ........... } \\ & \text { cacutiens, H.-S. } \end{aligned}$ |
| :---: |
|  |  |
|  |  |

Confined to South America.

## 18. Genus Nascus, nov.

Type, phocus, Cramer.
Antemne : clnb rather robust, bent into a hook, terminal portion very slender and rather longer than rest of club. Palpi upturned, third joint almost concealed. Fore wing: outer margin very much longer than imner margin, the apex being very conspicuously produced; cell more than two-thirds the length of costa; male with a costal fold ; discocellulars very oblique, the lower one slightly the longer ; vein 3 shortly before end of cell; rin 2 close to base of wing. Hind wing anally produced, and with an inconspicuous tooth at vein $1 b$; vein 7 close to end of cell; discocellulars and vein 5 barely traceable; vein 3 immediately before the end of the cell; vein 2 considerably nearer to end of cell than to base of wing. Hind tibix with a long fringe of coarse hairs and mith two pairs of spurs.


And three unidentified species.
Confined to South America.

## 19. Gemus Bungalotis, nov. (Plate III. fig. 7.)

Type, midas, Cramer.
Antennæ: club very gradually thickened and tapering to a fine point, bent at about a right angle ; terminal portion very long, about twice as long as remainder of club, and about one-fourth of the whole antenna. Palpi : third joint entirely concealed by the scales of the second joint. Fore wing: imer margin longer than outer margin, cell more than two-thirds the length of costa; male with a very prominent costal fold; discocellulars almost erect, subequal ; vein 3 more than three times as far from base of wing as from end of cell; vein 2 less than three times as far from end of cell as from base of wing. Hind wing produced at anal angle, but with no conspicmous lobe ; vein 7 well before end of cell, less than twice as far from 8 as from 6 ; discocellulars slightly outwardly oblique; vein 3 before end of cell; vein 2 twice as far from 3 as 3 is from 4 , and twice as far from base of wing as from 3. Hind tibie with a rather loug fringe and two pairs of spurs. The costa of the hind wing in the male of the type species is black with bluish reflections, a character which is probably sexual.

|  |
| :---: |
|  |  |
|  |  |
|  |  |

[^5]Confined to South America.

## 20. Genus Pteroxys, nov.

Type, phanceus, Hewitson.
Antennæ : club short, rather abruptly thickened and tapering to a fine point, bent at about a right angle at its thickest part, the terminal portion longer than the rest of the club; second joint of palpi densely scaled; the third joint almost entirely concealed. Fore wing : inner and outer margins subequal ; male with a costal fold; cell of fore wing three-fifths length of fore wing; vein 12 reaching costa just before end of cell; vein 6 well below end of cell ; upper discocellular short but distinct ; middle and lower discocellulars slightly oblique, the lower rather the longer; vein 3 shortly before end of cell, about four times as far from vein 4 as from base of wing; vein 2 less than twice as far from end of cell as from base of wing. Hind wing : vein 7 about three times as far from base of wing as from end of cell; middle discocellular crect, lower outwardly concave, the lower much the longer ; vein 5 from their angle; vein 3 from end of cell; vein 2 twice as far from base as from end of cell; outer margin even, lobe inconspicuous. Hind tibia with two pairs of spurs and a long tuft of hair from proximal end.
*phancers, Hew. ............... 1 .
*liddcrdali, Eiwes ...........
Confined to the Oriental region.

## 21. Genus Casyapa.

C'asypa, Kirby, Syn. Cat. Diurn. Lep. p. 576 (1871).
Type, corvus, Felder.
Chaetocneme, Felder, Sitzb. Ak. Wiss., math.-nat. Cl. vol. xl. p. 460 (1860) (nom. præocc.).

Antennæ long: club moderate, gradually thickened, tapering to a fine point; terminal portion bent but not hooked. Fore wing : male with a costal fold ; inner and outer margins subequal ; cell just twothirds the length of costa; vein 12 reaching costa before the end of cell; vein 8 from upper angle of cell ; vein $\overline{7}$ below angle; upper discocellular short, distinct, almost erect ; middle and lower discocellulars subequal, erect, and in the same straight line; vein 5 equidistant from 4 and 6 ; vein 3 well before end of cell, rather more than twice as far from base of wing as from end of cell; vein 2 three times as far from end of cell as from base of wing. Hind wing evenly rounded, not produced into a lobe; cell long, extending more than half across wing ; vein 7 shortly before end of cell, three times as far from 8 as from 6 ; discocellulars faint, nearly erect; vein 5 wanting; vein 3 just before end of cell; vein 2 three times as far from base of wing as from end of cell. Hind tibiæ densely fringed and with only the terminal pair of spurs.

$$
\left\{\begin{array}{l}
\text { corvus, Felder ............. } 1 . \\
\text { critomedia, Guér. ........ } \\
\text { ocix, Boisd. } \\
\text { *caristus, Hew. }
\end{array}\right.
$$

Confined to the East Indies.

## 22. Gellus Phenicops, nov. (Plate III. fig. 6.)

Type, beata, Hew.
Antenne: club moderate, gradually thickened and gradually tapering to a point, bent into a crescent, and not abruptly angled. Palpi porrect ; third joint minnte, entirely concealed by scales of second joint. Fore wiug: outer margin longer than inner margin, and more or less angled at rein 5 ; no costal fold on fore wing in male; cell two-thirds length of costa; upper discocellular short, middle discocellular almost erect, lower more oblique and slightly longer; reinlet in cell from just above vein 4 ; vein 3 close to cud of cell, quite five times as far from base of wing as from end of cell : rein 2 rather more than twice as far from end of cell as from base of wing. Hind wing : no anal lobe, outer maryin more or less angled at vein 3 ; vein 7 more than twice as far from 8 as from 6; upper discocellular short, erect, lower longer, outwardly concave; vein 5 present; veinlet in cell clearly traceable, the two branches meeting the upper and lower discocellulars respectively ; vein 3 just before end of cell; rein 2 ahmost three times as far from base of wing as from end of cell. Hind tibiæ with only the terminal pair of spurs, and in the male with a complete fringe of very long hairs.

$$
\begin{aligned}
& \text { *beata, Hew. .................... } 1 . \\
& \text { *denitza, Hew. ................. }
\end{aligned}
$$

Confined to the Australian region.

## 23. Genus Capila.

Capila, Moore, P. Z.S. 1865, p. 785. Type, jayadeva, Moore.
Antenne: club only slightly thicker than shaft, very gradually thickening and as gradually tapering to a fine point, evenly curved into a hook. Palpi : second joint clothed with longish hairs ; third joint short, porrect. Fore wing: no costal fold in male ; cell threefifths of costa; outer margin longer than inner margin; vein 12 reaching costa opposite end of cell ; vein 11 nearly opposite vein 3 ; vein 10 equidistant from 9 and 11 ; end of cell broadly truncate; upper discocellular minute, middle and lower discocellulars almost erect and in the same straight line, the lower the longer; veinlet beyond vein 4 ; rein 3 about twice as far from 2 as from end of cell; vein 2 slightly nearer to base of wing than to rein 3. Hind wing erenly rounded ; vein 7 shortly before end of cell ; middle discocellular almost erect, lower angled, the upper part inwardly oblique, the lower part outwardly oblique; rein 5 well dereloped; vein 3 just before end of cell; rein 2 close to end of cell, more than three times as far from base of wing as from end of cell. Hind tibie with two pairs of spurs, and with a tuft of hairs longer than the tibia attached to it near its proximal end.

Closely allied to Pisola.

Confined to the Indian subregion.

## 24. Genus Calliana.

Calliana, Moore, P. Z.S. 1878, p. 686. Type, pieriduides, Moore. [Antennæ wanting.]
Palpi almost erect, second joint thickly sealed, third joint minute. Fore wing: inner margin longer than outer margin; no costal fold in male; vein 12 reaching costa opposite end of cell; cell twothirds length of costa; upper angle of cell rounded ; upper discocellular short, outwardly oblique; middle and lower discocelluarars almost erect, the lower the longer; rein 3 about twice as far from 2 as from end of cell ; vein 2 slightly nearer to base of wing than to 3: veinlet in cell at just before rein 4. Hind wing evenly rounded; cell moderate, about half the length of costa ; rein 7 shortly before end of cell, more than four times as far from base as from end of cell ; middle discocellulars slightly outwardly oblique, lower slightly inwardly oblique, the lower about half as long again as the middle one ; vein 5 well developed, much nearer to 6 than to 4 ; vein 3 just before end of cell; vein 2 more than twice as far from base as from end of cell. Hind tibio with two pairs of spurs, and also with a tuft of hair longer than the tibia attached to it near its proximal end.

The sole species of this genus is pieridoides, Moore, which is not in the British Museum. The above diagnosis is from the type specimen kindly lent me for that purpose by Mr. Moore.

Confined to the Oriental region.

## 25. Genus Pisola.

Pisola, Moore, P.Z.S. 1865, p. 785. Type, zennaru, Moore.
Antenuæ and palpi much as in Capila. Vore wing : inner margin considerably longer than outer margin; neuration as in Calliuna, from which it differs only in having no tuft on the hind tibiæ in the male.
zennark, Moure .................
corinthus, Felder
c..........

$$
\text { cerinthus, Felder ............ } \because .
$$

Confined to Asia.

> 26. Genus Cecropterus.
> Cecropterus, Herr.-Schäff. Prodr. Syst. Lep. iii. p. 45 (1869). Type, zarex, Hübn.

Antenne: club moderate, bent into a hook, the terminal portion equal to remainder of club. Palpi porrect, second joint densely scaled, third joint small. Fore wing: outer margin longer than inuer margin; no costal fold in male; cell long, more than twothirds length of fore wing; rein 12 reaching costa before end of cell; upper discocellular minute, middle discocellular inwardly oblique, lower more erect; vein 5 nearer to 4 than to 6 ; vein 3 more than four times as far from base of wing as from end of cell; vein 2 twice as far from end of cell as from base of wing. Hind wing much produced in submedian area, but with no distinct lobe
or tail ; vein 7 more than tirice as far from 8 as from 6 ; discocellulars very faint, outwardly concave; vein 5 wanting; vein 3 at end of cell; vein 2 less than twice as far from base of wing as from end of cell, nearer to base of wing than rein 7 . Hind tibire fringed and with two pairs of spurs.


And three unidentified species.

## 27. Genus Cogia.

Cogia, Butler, Trans. Ent. Soc. Lond. p. 508 (1870).
Type, hassan, Butler.
Antennæ : club moderate, bent at about a right angle, tapering to a fine point. Third joint of palpi slightly projecting from the clothing of second joint. Fore wing: outer margin longer than inner margin; no costal fold in male ; cell more than three-fifths the length of costa; vein 12 reaching costa before the end of the cell ; middle and lower discocellulars inwardly oblique and in the same straight line, the middle the longer ; vein 3 twice as far from 2 as from end of cell; vein 2 more than twice as far from eud of cell as from base of wing. Hind wing : vein 7 only slightly further from base of wing than from end of cell; discocellulars erect, faint; vein 5 barely traceable; vein 3 just before end of cell; vein 2 rather nearer to end of cell than to base of wing.

Male with an erectile tuft of hairs on upperside of hind wing, attached immediately below the origin of the median nervule.

$$
\begin{aligned}
& \text { hassan, Butl. ................ } 1 . \\
& \left\{\begin{array}{l}
\text { calchas, H.-S. } \\
\text { terranea, Butl. }
\end{array}\right.
\end{aligned}
$$

And one unidentified species.
Confined to tropical America.

## 28. Genus Ephyriades.

Ephyriades, Hiibn. Verz. p. 111 (1816). Type, otreus, Cramer. Oileides, Hübn. Exot. Schmett. ii. (1822-26).

Type, zephodes, Hiibn.
Antemue as in Coyia. Palpi more widely separated, porrect; third joint rather conspicuous. Fore wing : inner and outer margins subequal, or the inner sligbtly the longer ; no costal fold in male; cell just over two-thirds the length of costa; vein 12 reaching costa almost opposite to the end of cell ; middle and lower discocellulars almost erect, subequal ; rein 5 slightly nearer to 6 than to 4 ; vein 3 very shortly before end of cell, more than three times as far from 2 as from 4 ; vein 2 more than twice as far from base of wing as from end of cell. Hind wing: vein 7 close to end of cell, remote from base of wing; discocellulars faint; vein 5 barely
traceable; vein 3 immediately before end of cell; vein 2 considerably nearer to end of cell than to base of wing. Hind tibiæ with two pairs of spurs.

Male with the abdominal fold clothed with long hair-like scales.

$$
\left\{\begin{array}{l}
\text { otrcus, Cram. ...... } 1 . \\
\text { clerious, Fabr. } \\
\text { zephodes, Hübu. } \\
\text { *pekahia, Hew. .... } 2 .
\end{array}\right.
$$

And five unidentified species.
Confiued to tropical America.

## 29. Geuus Thorybes.

Thorybes, Scudder, Syst. Rev. Am. Butt. p. 50 (1872).
Type, bathyllus, Smith-Abb.
Thorybes, Scudder, Butt. East. Un. States, rol. ii. p. 14:23 (1889).
Lintneria, Butler, Trans. Ent. Soc. p. 57 (18Ti) (nom. prencc.).
Type, duunus, Cramer.
Antenuæe and palpi as in Achalarus. Fore wing: inner and outer margins subequal ; cell more than two-thirds length of fore wing; rein 12 reaching costa before end of cell: upper discocellular minute, middle and lower discocellulars inwardly oblique and in the same straight line, the lower the longer; veiu 3 more than three times as far from base of wing as from end of cell; vein 2 about three times as far from end of cell as from base of wing; reiulet in cell at vein 4 . Hind wing: vein 7 about twice as far from 8 as from 6 ; discocellulars faint, slightly concave outwardly; vein 3 from end of cell; veiu 2 rather nearer to end of cell than to base of wing, nearer to base of wing than vein 7 ; outer margin evenly rounded, slightly angled at veiu $1 b$. Hind tibix with two pairs of spurs.

In this genus the type species, bathyllus, is without a costal fold in the male, while the second species, pylades, is provided with a fold.

$$
\left\{\begin{array}{l}
\text { \{launus, Uram. ........ } 1 . \\
\text { bathyllus, S'm.-dbb. } \\
\text { pylades, Sc. .......... } . .
\end{array}\right.
$$

Contined to America.

## 30. Genus Achalarus.

Achalarus, Scudder, Syst. Rev. Am. Butt. p. 50 (1872).
Type, lycidas, Smith-Abb.
Achalarus, Scudder, Butt. East. Un. States, vol. ii. p. 1412 (1889).
Lobocla, Moore, Journ. As. Soc. Beng. vol. liii. pt. 2, p. 51 (1884). Type, liliana, Atkinson.
Antenuæ : club moderate, bent into a hook, the terminal portion about as long as rest of club. Palpi porrect, second joint densely scaled, third joint short. Fore wing : inner and outer margins subequal ; vein 12 reaching costa before end of cell; male with a costal fold ; cell long, more than two-thirds length of costa; upper discocellular minute, middle and lower discocellulars inwardly oblique in

Proc. Zool. Soc.-1893, No. III.
the same straight line, the lower the longer ; reinlet at vein 4; reiu 3 more thau four times as far from base of wing as from end of cell; rein 2 about three times as far from end of cell as from base of wing. Hind wing slightly lobed at anal angle ; discocellulars faiut, erect; vein 5 present, but very faint ; vein 7 three times as far from 8 as from 6 ; vein 3 just before end of cell; vein 2 almost twice as far from base of wing as from end of cell. Hind tibiæ with two pairs of spurs.


American and Asian.
31. Genus Rhabdoides.

Rhabdoides, Scudder, Butt. East. Un. States, vol. iii. p. 1854 (1889).
Type, cellus, Boisdural.
Antemux, palpi, neuration, and legs as in Achalarus, from which it differs ouly in the absence of the costal fold in the male.
cellus, Boisd.
And one unidentified species.
Coufined to America.

## 32. Gemus Drephalys, not.

T'ype, Kelixus, Hew.
Antenne and palpi as in Typhedanus. Fore wing : outer margin slightly longer than inner margin; male with a costal fold; cell of fore wing more than three-fifths the length of costa : rein 12 reaching costa almost opposite end of cell ; discocellulars nearly erect ; rein 3 well before end of cell, considerably nearer to 4 thau to 2 ; vein 2 close to base of wing, about three times as far from end of cell as from base of wing. Hind wing much produced, but not to a point. Neuration as in T'yphedanus.

* helixus, Hew.


## 33. Gemus Typhedanus.

Typhedanus, Butler, Trans. Ent. Soc. Lond. p. 497 (1870).

> Type, zephus, Butler.

Antennæ : club moderate, bent into a hook, the terminal portion very slender, about half the length of remainder of club. Palpi: third joint minute, hardly projecting from clothing of second joint. Fore wing much produced apically, outer margin considerably longer than inner margin; cell of fore wing more than two-thirds the length of costa; no costal fold in male ; vein 12 reaching costa well before the end of cell ; discocellulars inwardly oblique, subequal; rein 5 nearer to 6 thau to 4 ; vein 3 shortly before the end of cell, about twice as far from 2 as from 4 ; rein 2 twice as far from end of cell as from basc of wing. Hind wing produced to a point at the anal angle: nuter margin rery oblique, slightly concave; vein 7
well before end of cell, almost equidistant from veins 8 and 6 ; discocellulars and vein 5 barely traceable; wein 3 well before end of cell, equidistant from 2 and 4 ; rein 2 considerably nearer to end of cell than to base of wing. Male with a tuft of long recumbent hairs lying along the outer edge of the abdominal fold on the upperside of the hind wing and attached along vein $1 b$ near its origin. Hind tibie with two pairs of spurs.

> zephus, Butler.

Inhabits tropical South America.

## 34. Genus Echydrus, nov.

Type, chersis, H.-S.
Autennæ: club rather robust, bent into a hook. Palpi porrect; second joint long, densely clothed ; third joint short, obtusely conical, almost concealed. Fore wing: apex rery truncate, much as in Spathilepia; outer margin considerably longer than inner margin; cell two-thirds the length of costa; rein 12 reaching costa almost opposite the end of cell ; discocellulars slightly inwardly oblique; vein 5 nearer to 6 than to 4 ; vein 3 immediately before the end of cell; vein 2 twice as far from end of cell as from base of wing. Hind wing much produced; vein 7 well before end of cell; discocellulars distinct; vein 5 rery faint; vein 3 immediately before the end of cell; vein 2 about three times as far from base of wing as from end of cell. Hind tibiz fringed and with two pairs of spurs.

Male with an erectile tuft of hairs at base of abdominal folds, much as in Cogia.

$$
\left\{\begin{array}{l}
\text { chersis, H.-S. ... } 1 . \\
\text { ceelinda, Butler. } \\
\text { * azivis, Hew. ...... } 2 .
\end{array}\right.
$$

Confined to tropical America.

## 35. Genas Porphyrogenes, nov.

T'ype, omphale, Butler.
Antennæ: club very slender, sickle-shaped, terminating in a fine point. Palpi: third joint bluntly conical, slightly projecting from the clothing of the second joint. Fore wing: inner and outer margins subequal; male with a costal fold; rein 12 reaching costa well before the end of cell; cell very long, almost three quarters the length of costa ; discocellulars inwardly oblique, the middle slightly the longer; lower margin of cell between veins 3 and 4 arched upwards; vein 3 well before the end of the cell, only slightly farther from 2 than from 4 ; vein 2 slightly nearer to base of wing than to rein 3. Hind wing : rein 7 shortly before end of cell; discocellulars and vein 5 barely traceable; vein 3 from end of cell; vein 2 more than twice as far from base of wing as from end of cell. Hind tibio fringed and with two pairs of spurs.

In the male the inner margin of the fore wing is strongly arched; there is a tuft of short hairs on a silvery patch on the upperside of the hind wing at the origin of vein 8 , there being a corresponding
silvery patch on the underside of the fore wing, and the abdominal fold of the hiud wing is densely clothed with long hair-like scales.

$$
\text { omphale, Butler ......... 1. I *pausias, Hew. ............. } 2 .
$$

Confined to South America.
36. Genus Cecina.

Cæecina, Hewitson, Desc. Hesp. p. 5.5 (1868).
Type, calathana, Hewitson.
Antenm: club moderate, gradually thickening and gradually tapering to a point, evenly curved, not abruptly bent. Palpi : second joint densely scaled; third joint short, porrect, bluntly pointed. Fore wing : inner margin sinuate, rather longer than outer margin ; cell two-ihirds the lengtl of costa; rein 12 reaching costa before end of cell; upper discocellular very short; middle and lower discocellulars subequal, inwardly oblique in the same straight line; vein 3 more than three times as far from base of wing as from end of cell; vein 2 about twice as far from end of cell as from base of wing. Hind wing: lobe inconspicnous; vein 7 very shortly before end of cell ; discocellulars faint, outwardly oblique; vein 5 wanting ; vein 3 just before end of cell ; vein 2 hardly twice as far from base of wing as from end of cell. Hind tibiæ almost naked, with two pairs of spurs.

The male has a patch of hairs on the upperside of the hind wing, extending along the upper edge of the subcostal rein from the divaricatiou of the costal to the forking of the subcostal branch, the hairs being flattened on the wing and pointing towards the costa.

$$
\text { * calathuna, Неш. ......... 1. | * compusa, Hew. .......... } 3
$$

Confined to tropical America.

## 37. Genus Ablepsis, nor.

Type, vulpinus, Hübn.
Antennæ: club moderate, rather flattened, sickle-shaped. Palpi suberect ; secoud joint pressed close against face, third joint minute. Fore wing: inner and outer margins subequal; no costal fold in male ; cell of fore wing more than two-thirds the length of costa; discocellulars inwardly oblique, the lower the longer ; veinlet in cell immediately before vein 4 ; vein 3 shortly before end of cell ; vein 2 about three times as far from end of cell as from base of wing: lower margin of cell bent upwards at origin of vein 3. Hind wing evenly ronuded; vein 7 well before end of cell ; discocellulars and rein $\overline{5}$ barely traceable; vein 3 from end of cell; rein 2 twice as far from base of wing as from end of cell. Hind tibiæ thickly fringed and with two pairs of spurs.

In the male there is a tuft of long hair-like scales attached to the submedian at the base of the abdominal fold on the underside.

> vulpinus, Hübu.

And one unideutified species.
Confined to South America.

## 38. Genus Hantana.

Hantana, Moore, Lep. Ceyl. rol. i. p. 179 (1881).
Type, infernus, Felder.
Antennæ: club rather robust, bent at about a right angle. Palpi suberect ; second joint pressed close against the face, third joint minute. Fore wing: inner and outer margins subequal ; cell more than two-thirds the length of costa ; no costal fold in male ; rein 12 reaching costa well before the end of cell; discocellulars inwardly oblique, the lower the longer ; lower branch of veinlet in cell just before rein 4; upper branch at rein 5 ; vein 3 shortly before end of cell: vein 2 about three times as far from end of cell as from base of wing. Hind wing evenly rounded; rein 7 well before the end of cell; discocellulars distinct, rein 5 barely traceable; rein 3 immediately before the end of cell; vein 2 twice as fir from base of wing as from cud of cell. Hind tibix with two pairs of spurs, and in the male with a long tuft of hairs attached near the proximal end. infermus, Felder.
Ifralitat. Ceylon.

## 39. Genus Murgaria, not.

## Type, albociliutus, Mab.

Antennæ: club gradually thickened and tapering to a fime point, bent into a hook just beyond the thickest part. Palpi : second joint densely scaled, slightly inclined forward; third joint short, porrect. Fore wing : onter margin slightly longer than inner margin; male with a costal fold; cell more than two-thirds length of costa; vein 12 reaching costa before the end of cell; vein 10 equidistant from 9 and 11 ; upper discocellular minute ; middle and lower discocellulars inwardly oblique, in the same straight line, the middle one the longer; vein 3 twice as far from 2 as from 4 , more than threc times as far from base of wing as from end of cell. Hind wing inconspicuously lobed; rein $\overline{7}$ more than twice as far from 8 as from 6 ; discocellulars erect; rein 5 wanting; rein 3 immediately before end of cell ; vein 2 about equidistant from end of cell and base of wing. Hind tibiæ rery slightly fringed and with two pairs of spurs.
albociliatus, Mab.
1.

And an unidentified species.
Tropical America.
40. Genus Æthilla. (Plates II. fig. 16; III. fig. 5.)

AEthilla, Hewitson, Desc. Hesp. p. 55 (1868).
'Type, eleusinia, Hewitson.
? Eurypterus, Mabille, Pet. Nouv. ii. p. 162 (1877).
Trpe, gigas, Mabille.
Antennæ: club hardly at all thickened, bent at about a right angle; terminal portion long. Palpi: second joint thickly scaled, hird joint minute. Fore wing : inner and outer margins subequal; cell two-thirds length of costa; no costal fold in male; vein 12 eaching costa just opposite end of cell ; rein 11 opposite rein 3 ;
vein 9 rentate from 10 , close to end of cell; vein 6 from upper angle of cell; upper discocellular minute; middle discocellular erect, lower slightly inwardly oblique, the lower rather the longer ; rein 3 well before end of cell, about equidistant from 2 and 4, and twice as far from base of wing as from end of cell. Hind wing triangular, hardly lobed at anal angle; vein 7 three times as far from 8 as from 6 ; discocellulars faint, erect; vein 3 well before end of cell, twice as far from 2 as from 4 ; rein 2 slightly nearer to end of cell than to base of wing. Hind tibie with two pairs of spurs and with a long tuft of coarse hairs attached near the proximal end.
E. gigas, Mab., the type of Eurypterus, is not in B. M., but as the other two species, viz. lavochrea, Butler, and coracina, Butler; which M. Mabille puts into his gemus, are congeneric with eleusinia, Hewitson, the type of Ethilla, therefore gigus also is presumally an Ethilla.

$$
\begin{aligned}
& \text { * eleusinia, Hew. ........... } 1.1 \mid \text { * chinu, Hew. ............... } 4 . \\
& \text { coracina, Butl. ............ } 2 . \\
& \text { * cpicra, Her. ............... } 3 . \\
& \text { lavochrea, Butl. ............ 5. }
\end{aligned}
$$

And an unidentified species.
Confined to tropical America.

## 41. Gemus Ancistrocamita. <br> Ancistrocampta, Feld. Wien. ent. Monat. vi. p. 183 (1862). <br> Type, hiarbas, Cramer.

Antemæ: club very slightly thickened, bent at more than a right angle, tapering to a fine point, the front edge of club fringed with short widely set bristles. Palpi: third joint almost invisible. Fore wing: inner and outer margins subequal; no costal fold in male; cell well over two-thirds the length of costa; vein 12 reaching costa well before the end of cell; discocellulars suberect; rein 5 slightly nearer to 6 than to 4 ; vein 3 well before end of cell, more than twice as far from 2 as from 4; rein ? remote from 3 , twice as far from end of cell as from base of wing. Hind wing: vein 7 shortly before end of cell ; discocellulars very faint, slightly inwardly concave; vein 5 just traceable, nearer to 6 than to 4: vein 3 immediately before end of cell; rein 2 only slightly nearer to end of cell than to base of wing. Hind tibix with two pairs of spurs, the upper pair minute, and with a tuft of hairs attached near the proximal end.

$$
\begin{aligned}
& \text { hiurbas, Cram. ......... } 1 . \\
& \text { * suthina, Hew. ........ } 2 .
\end{aligned}
$$

Confined to tropical South America.

## 42. Genis Hydrenomia.

IIydrcenomia, Butler, Ent. Mon. Mag. vii. p. 99 (1870).
Type, orcinus, Felder.
Antemæ: club moderate, bent iuto a look, terminal portion short. Palpi porrect, divergent; third joint slender, naked, rather short. Fore wing: inner margin longer thau outer margin, the
latter excarated from rein 2 to the onter angle; cell two-thirds the length of costa; male with a costal fold; vein 12 reaching costa well before the end of cell; discocellulars suberect; vein 5 nearer to 6 than to 4 ; vein 3 shortly before end of cell, more than twice as far from 2 as from 4 ; wein 3 more than twice as far from end of cell as from base of wing. Hind wing: outer margin crenulated; rein 7 well before the end of cell; discocellulars and vein 5 barely traceable; vein 3 shortly before end of cell; vein 2 only slightly nearer to end of cell than to base of wing. Hind tibize slightly fringed and with two pairs of spurs.
orcinus, Felder.
Confined to tropical South America.

## 43. Gemis Paradros, nov.

Type, phrenice, Hew.
Nearest to Lignyostola, Mab., with which it agrees in neuration, except that the veinlet in the cell terminates only just beyond vein 3, and that rein 2 of the fore wing is considerably nearer to the base of the wing. The antemme are longer and have the club more bent round. The palpi are similar. The hind wing is quite a different shape, being much produced in the submedian area, while in Lignyostola it is much produced in the subcostal area. The anal lobe is also comparatively inconspicunus, the outer margin not being excised just before it.


Confined to South America.

## 44. Genus Lignyostola.

Lignyostola, Mabille, Le Naturaliste, p. 221 (1888).
Antenne: : club moderate, bent into an even curve, tapering to a fine point. Palpi porrect, divergent, third joint slender and naked. Fore wing: inner and outer margins subequal; cell more than two thirds the length of costa : vein 12 reaching costa well before the end of cell; veinlet in cell just before vein 5 ; discocellulars inwardly obliqne, subequal, the mildle one slightly convex; vein 3 shortiy before end of cell, about three times as far from 2 as from 4; vein 3 twice as far from end of cell as from base of wing. Hind wing distinctly lobed; vein 7 well before end of cell, twice as far from 8 as from 6 ; discocellulars and vein 5 barely traceable ; vein 3 immediately before end of cell : vein 2 considerably nearer to end of cell than to base of wing.

Male with a costal fold. Hind tibiæ densely fringed, and with two pairs of spurs, the upper pair short.
$\left\{\begin{array}{l}\text { lacydus, Druce } \\ \left.\begin{array}{l}\text { pemphigargyra, Mab. } \\ \text { crinisus, Cram. ........... 2. }\end{array}\right\} \begin{array}{l}\text { despecta, Butler } \\ \text { formosus, Felder }\end{array} \text {................. } 3 .\end{array}\right.$

And two unidentified species.
Confined to tropical America.

## 45. Genus Phanus. (Plate I. fig. 7.)

Phanus, Hübner, Verz. p. 114 (1816). Type, vitreus, Cramer.
Antemnæ: club very gradually curved into a crescent, short, rather flattened, cousiderably thicker than shaft, tapering to a fine point. Palpi: second joint upturned, densely scaled; third joint maked, rather conspicuons. Fore wing: inner and outer margins subequal ; male with a costal fold ; cell more than two-thirds the length of costa; vein 12 reaching costa before end of cell; upper discocellular short but distinct, outwardly oblique ; middle and lower discocellulars almost erect, the middle the longer ; vein 3 rather more than twice as far from base of wing as from end of cell ; vein " rather more than twice as far from end of cell as from base of wing. Hind wing prominently lohed at vein $3 b$; vein 7 rather more than twice as far from 8 as from 6 ; discocellulars very faint, erect; vein 5 wanting: vein 3 from end of cell; vein 2 more than twice as far from base of wing as from end of cell. Hind tibiæ fringed and with two pairs of spurs.

$$
\left\{\begin{array}{l}
\text { vitrcus, Cram. ............... } 1 . \\
\text { momus, Fabr. } \\
\text { marshalli, Kirby ............ } 2 .
\end{array}\right.
$$

And one unidentified species.
Confined to tropical America.

## 46. Genus Hyalothyrus.

Hyalothyrus, Mabille, Ann. Ent. Belg. vol. xxi. p. 23 (1878). Type, nitocris, Cramer.
Antennæ rather long; club very slender, hardly thicker than shaft, bent into a slight curve. Palpi porrect, divergent; third joint long, slender, and uaked. Fore wing: inner and outer margins subcqual: male with a costal fold; cell more than two-thirds the leugth of costa; vein 12 reaching costa before the end of the cell ; discocellulars inwardly oblique, subequal ; vein 3 shortly before the end of cell, about three times as far from 2 as from 4 ; vein 2 three times as far from end of cell as from base of wing. Hind wing well before the end of cell ; discocellulars and vein 5 barely traceable; vein 3 immediately before end of cell; vein 2 considerably nearer to end of cell than to base of wing. Ifind tibie with only a terminal pair of spurs and without a brush. Closely allied to Entheus.

> infcrnalis, Mösch. ......... 1. $\left\{\begin{array}{c}\text { neleus, Linns............ } \\ \text { priseus, Feld. }\end{array}\right.$

Confined to South America.

## 47. Genus Entheus. (Plate III. fig. 9.)

Entheus, Hübn. Verz. p. 114 (1816). Type, peleus, Linn.
Phureas, Westw. Gen. D. I. p. 515 (1852). Types, gentius, Cr., and peleus, Linn.
Antenne: club slender, evenly curved into a crescent. Palpi
porrect, divergent ; third joint long and slender. Fore wing : imer margin louger than outer margin ; no costal fold in male; cell twothirds the length of costa; vein 12 reaching costa well before the end of cell ; discocellulars suberect; vein 5 slightly nearer to 6 than to 4 ; vein 3 shortly before end of cell, more than three times as far from 2 as from 4 ; vein 2 rather more than twice as far from cud of cell as from base of wing Hind wing: rein 7 shortly before end of cell ; discocellulars and vein 5 hardly traceable ; vein 3 just before eud of cell; rein 2 about equidistant from base of wing and end of cell. Hind tibie very short, only with terminal pair of spurs, which are very long.

In the male there is a tuft of hairs attached to the proximal end of the tibix, much exceeding the tibix in length, and fitting into a groove behind the first joint of the tarsi, which is much elongated and slightly swollen. In the female the hind tibix are longer than in the male, and the terminal spurs are shorter.
$\left\{\begin{array}{l}\text { tulaus, Linn. } 0^{*} \text {.............. } 1 . \\ \text { pelcus, Linn. } 8 .\end{array}\right.$
Confined to South America.

$$
\left\{\begin{array}{c}
\text { lemna, Butl. } \delta^{\circ} . . . . . . . . . . . ~ \\
\text { *berytus, Hew. } 9 . \\
\text { gentius, Cram................ : } \% .
\end{array}\right.
$$

## 48. Gemis Cabirus.

Cabirus, Hiibn. Verz. p. 102 (1816). Type, julettus, Stoll. Brontiades, Hübn. Verz. p. 113 (1816). 'Type, procus, Cram.
Antennæ: club very slender, almost filiform, almost straight. Third joint of palpi short, conical, projecting slightly from the clothing of the second joint. Fore wing : inner margin slightly longer than outer margin; no costal fold in male; cell more than three-fifths the length of costa; rein 12 reaching costa alinost opposite to end of cell ; discocellulars almost ereet, subequal : vein 5 slightly nearer to 6 than to 4 ; vein 3 well before end of cell, less than twice as far from 2 as from 4 ; vein 2 remote from 3, more than $t$ wice as far from end of cell as from base of wing. Hind wing: rein 7 well before end of cell ; discocellulars erect, very faint; vein ; barely traceable, nearer to 6 than to 4 ; vein 3 just before the end of the cell, nearer to 4 than to 2 ; vein 2 about equidistant from base of wing and end of cell. Hind tibie with only a single pair of spurs.

Male with a tuft of hairs affixed at the proximal end of the hind tibie.

This genus is closely allied to Entheus.


These two species are almost certainly sexes, procas being the male.

Confined to tropical South America.

## 49. Genus Grynopsis, hov.

Type, coeleste, Westwood.
Antenme rather long; club slender, hardly thicker than the shaft, the front edge of shaft fringed with short widely-set bristles. Third joint of palpi entirely concealed in the clothing of the second joint. Fore wing : outer margin almost half as long again as imer margin : male with a costal fold; vein 12 reaching costa before the end of cell ; cell very long, considerably more than two-thirds the length of costa; discocellulars very oblique, subequal; vein 5 slightly nearer to 4 than to 6 ; the lower margin of the cell is bent up betweeu veins 3 and 4 , lying almost in the same straight line as the discocellulars; vein 3 well before the end of the cell; vein 2 remote from 3 , as far from base of wing as 3 is from end of cell. Hind wing produced into a broad lobe, extending from vein 3 to the anal angle; vein 7 well before end of cell : discocellulars very faint ; vein 5 barely traceable, much nearer to vein 4 than to 6 ; vein 3 from end of cell; rein 2 slightly wearer to end of cell than to base of wing. Hind tibie only with terminal pair of spurs.

Male with the abdominal margin clothed with long hair-like scales.

$$
\text { caleste, Westwood ......... } 1 .
$$

## Inhabits tropical South America.

## Synopsis of Genera of Hesprerines.

$$
\text { Section } 13 .
$$

a. Antennæ: tip acuminate.
" Apex of fore wing not truncate.
$u^{2}$. Outer margin of both wings even or only slightly simuate (dentate in Evites). $a^{3}$. Apex of fore wing not falcate.
$a^{1}$. Third joint of palpi short and inconspicuous.
$a^{5}$. Hind wing conspicnously elongated.
$u^{k}$. Third joint of palpi sharply conical.
Neonoma, g. ⿲. Type, platon, Feld. (1)
$l{ }^{\prime \prime}$. Third joint of palpi bluntly conieal.
$a^{7}$. Male with a large patch of sexual seales on outer half of hind wing on upperside.
Amedrotis, Butl., Druce. Type, tractipennis, Dutl., Dr. (2)
$b^{2}$. No sexual patch of scales on npperside of hind wing in male.
a'. Vein 2 of hind wing almost equidistant from base of wing and end of cell.

Sor'hista, Plötz. Type, aristoteles, Westw. (3)
i. Vein 2 , hind wing, twice as far from base of wing as from end of cell.

Sitinura, Moore. Type, gopala, Moore. (4)
$b^{5}$. Hind wing not at all or only slightly elongated.
$a^{4}$. No costal fold on fore wing of male.
$a^{7}$. Lower margin of cell of fore wing not strongly arched between origin of veins 2 and 3 .
$u^{\prime}$. No patch of sexual scales on upperside of hind wing in male.
$u^{9}$. Hind wing: outer margin sinuate.
$a^{10}$. Third joint of palpi porrected horizontally.
$a^{11}$. Vein 7 of hind wing as long as or longer than vein 2.

Dirmio, Murr. Trpe, tethys, Mén. (5)
$b^{11}$. Yein 7 of hind wing shorter than vein 2 .
$a^{12}$. Outer margin of hind wing rather dentate, the deepest excision being at vein $\overline{5}$.

Elites, Mab. Trpe, melunia, Mab. (6)
, 12. Outer margin of hind wing only slightly sinuate.
${ }^{13}$. Lowrer margin of cell of fore wing between veins 2 and 3 slightly arched.
Sheasces.l, Moore. Type. purcidra, Moore. (7)
$b^{13}$. Tower margin of cell of fore wing between reins $\because$ and $: 3$ straight.
Curabexha, Moorc. TYpe, imdroni, Moore. (8)
$b^{10}$. Third joint of palpi suberect.
Celemonhusta, Hiibn. Type, rliyius, Cram. ( $($ )
li. Hind wing : outer margin even.
$a^{10}$. Vein 7 of hind wing hardly nearer io if than to 8.

Omx., Mab. Type, chrysomelenu, Mab. (10)
$\iota^{10}$. Vein $\bar{T}$ of hind wing considerably near to 6 than to 8 .
$a^{11}$. Vein :3 of fore wing well before the end of cell.
$a^{12}$. Fore wing comparatively elongate.
Phamines, Hübn. Type, scurra, Hïbn.(11)
$b^{12}$. Fore wing not elongate.
$a^{13}$. Inner margin of fore wing considerably longer than outer margin.

* Pytionides, Mübn. Tspe, ceriulis, Cramı. (12)
* Nisoniades, Hübn. T'ype, Uromius, Stoll. (1:i)
$b^{13}$. Inner and outer margins of fore wing subequal.
* Cyciosemia, Mab. Type, hercmius, Cram. ( $1-1$ )
$l,{ }^{11}$. Vein 3 of fore wing immediately before end of cell.
Armliodes, ILiibu. Type, fredericus, Hibun. (15)
b. Nale with a large patch of sexual scales on upperside of hind ming.
Trichosemena, Holl. Type, subolivescens, Holl. (16i)
$b^{7}$. Lower margin of cell of fore wing strongly arched between origins of veins 2 aud 3 .

Tagiades, Hübn. Type, japetus, Cram. (17)
1,'. Male with a costal fold.
$"^{7}$. Costal fold large ; apex of tore wing hardly produced,
rounded. Eagms, Guenée. TYpe, sabuctius, Gray. (18)
$b^{i}$. Costal fold slight; apex of fore wing more produced, acute. Lnastrus, Hübn. Tspe, obscurus, Hübn. (19)
${ }^{21}$. Third joint of palpi porrect, conspicuous.
$u^{5}$. Male with a costal fold, costa of fore $\pi$ ing angled at about its centre.

Camptoplevra, Mab. Type, theramencs, Mab. (20)
$b^{5}$. No costal fold in male, costa of fore wing not angled.
$a^{6}$. Antennal club evenly curred.
Potaminax, g. n. Type, flarofasciuta, Hew. (21)

[^6]$b^{6}$. Antennal club hooked.
$a^{7}$. Vein 7 of hind wing nearer to 8 than to 6 .
Mycteris, Mab. Type, corula, Mab. (22)
$b^{\top}$. Vein 7 of hind wing close to 6 .
Pellicha, H.-S. Type, Mimidiata, H.-S. (23)
b3. Apex of fore wing falcate. Eantis, Boisd. Type, busiris, Cram. (ㄴ-4)
$l, i^{2}$. Outer margin of hind ring with a conspicuons projecting tooth at
vein 7.
Antigonvs, Hubn. 'L'ype, neurchus, Latr. (25)
$c^{2}$. Outer margin of hind ming rery dentate.
Dairs, Moore. Trpe, hauria, Moore. (26)
h, Apcx of fore wing broadly truncate (except in Tipeno agmi).
$/^{2}$. Male with a tuft of hairs on hind tibire.
$a^{3}$. Outer margin of hind wing not anglet.
al. Third joint of palpi inconspicuous.
Spronapes, Hübn. Type, artemides, Cram. (2〕)
1,4. Thired joint of palpi conspicuous.
Ivisochorti, Mab. Type, polysticta, Mab. (28)
Plocamita, Holl. Type, raia, Holl. (29)
$l^{3}$. Outer margin of hind wing angled at reins 7 and 4 .
Ctenorthles, de N. Type, vasava, Moore. (30)
$c^{3}$. Outer margin of hind wing angled at vein 3 (except agni).
Tapena, Moore. Type, thucaitesi, Moore. (31)
$b^{2}$. No tuft of hair on hind tibir of male.
Metrocoryne, Feld. Type, repanda, Feld. (32)
b. Antenuæ, tip blant.
$a^{1}$. Fore wing, apex truncate.
$a^{2}$. Male with a recumbent tuft of hair on fore coxa.
Odontoptilum, de N. Type, sura, Moore. (33)
$b^{2}$. Male with a radiating tuft of hair on fore coxa.
Caproni, Wallgr. Trpe, pillaana, Wallgr. (34)
$b^{1}$. Fore wing, apex acute.
$a^{2}$. Male with a radiating tuft of hair on fore coxe.
Leccochitonea, Wallgr. Type, lceubu, Wallgr. (35)
$l^{2}$. No tuft of hair on fore cosx of male.
$\|^{3}$. Vein 2 of hind wing considerably nearer to end of cell than to base of wing. Abastis, Hopff. Type, tettensis, Hopff. (36)
$\ell^{3}$. Vein 2 of hind wing hardl?, if at all, nearer to end of cell than to base of wing.
$a^{ \pm}$. Vein 2 of fore wing considerably nearer to base of wing than 10 rein :
$u^{3}$. Fore wing comparatively short and broad.
Pholisora, Sc. Type, catullus, Fabr. (41)
$b^{5}$. Fore wing comparatively elongate.
Heliopetes, Billb. Type, arsalte, Linn. (37)
$6^{4}$. Vein 2 of fore wing hardly nearer to base than to vein 3 .
$a^{5}$. Outer margin of hind wing even.
$a^{6}$. Antennal club straight.
Gomillis, Moore. Type, albofasciata, Moore. (39)
$b^{\text {e }}$. Antennæ, club curved.
$a^{\top}$. Club robust. Hesperia, Fabr. Trpe, malvae, Linn. (38) $b^{7}$. Club comparatively slender.

Thanaos, Boisd. Type, tages, Lim. (4:)
$b^{5}$. Outer margin of hind wing crenulated.
Carcmarones, Hbn. Type, laraterce, Esp. (40)

## 1. Genus Neonoma, nom. nov.

Conognathus, Felder, Wien. ent. Monat. vi. p. 181 (1862), præoc. Type, platon, Feld.
Antennæ : club rather robust, bent into a hook, terminal portion short. Palpi widely separated, porrect; third joiut sharply conical.

Fore wing: outer margin longer than inner margin: no costal fold in male : cell less than two-thirds the length of costa; vein 12 reaching costa shortly before the end of cell; discocellulars suberect ; rein 5 nearer 6 than 4 ; reinlet from lower discocellular ; vein 3 well before end of cell, twice as far from 2 as from 4; vein 2 twice as far from eud of cell as from base of wing. Hind wing much produced; vein 7 nearer to base of wing than to end of cell ; discocellulars and rein 5 rery faint; rein 3 immediately before end of cell; vein 2 three times as far from base of wing as from end of cell. Hind tibiæ with two pairs of spurs.
platon, Fabr.

Confined to tropical America.
The genus Garga of Mabille ('Le Naturaliste,' p. 216, 1889), described for the species olena, is apparently congeneric with conognathus, and olena is probably identical with platon.

## 2. Genus Arteurotia.

Arteurotia, Butler \& Druce, Cist. Ent. i. p. 112 (1872).
Type, tractipemis, Butler, Drucc.
Antemæ: club rather robust, hooked, terminal portion short, less than half the length of club. Palpi porrect, widely separated; third joint obtusely conical. Fore wing : outer margin rather longer than inner margin; inner margin convex in its onter half; cell of fore wing less than two-thirds the length of costa; vein 12 reaching costa opposite end of cell ; discocellulars suberect, the lower the longer ; vein 3 shortly before end of cell, twice as far from 2 as from 4 ; vein 2 twice as far from end of cell as from base of wiug. Hind wing elongate, onter margin straight ; discocellulars distinct ; vein 5 barely traceable; vein 3 immediately before end of cell; vein 2 hardly nearer to end of cell than to base of wing. Hind tibie with two pairs of spurs.

The male is without a costal fold, but is provided with a large silky patch of appressed scales, occupying the apical half of the hind wing on the upperside.
tractipennis, Butl., Druce.
Confined to tropical America.

## 3. Genus Sophista.

Sophista, Plötz, Stett. ent. Zeit. xl. p. $1 / 6$ (1879).
Type, aristoteles, Westw.
Antenuæ : club moderate, bent into a hook, terminal portion very slender, less than half the length of remainder of club. Palpi porrect, widely separated; third joint obtusely conical. Fore wing : inner and outer margins subequal ; cell of fore wing less than twothirds the length of costa; vein 12 reaching costa almost opposite the end of cell ; discocellulars suberect, the lower the longer; vein 3 shortly before the end of cell, more than twice as far from 2 as from 4 ; vein 2 more than twice as far from end of cell as from base of
wing. Hind wing rather elongate, onter margin slightly crenulate ; discocellulars and vein 5 barely traceable: rein 3 immediately before the end of cell; rein 2 hardly nearer to the end of cell than to the base of wing. Hind tibie with two pairs of spurs.

There is no costal fold in the male of aristoteles, and a hardly perceptible one in the male of calendris.

$$
\begin{aligned}
& \text { * aristoteles, Westw. ............. } 1 . \\
& \text { * calendris, Hew. ............ }
\end{aligned}
$$

Confined to tropical South America.
4. Genus Sitarupa.

Saturupa, Moore, P. Z. S. 1865, p. 780. Type, gopala, Moore.
Antennæ: club slender, bent into a hook, terminal portion long. Palpi porrect ; third joint short, bluntly conical. Fore wing: outer margin strongly oblique, inner and outer margins subequal; cell less than two-thirds the length of costa; discocellulars inwardly oblique; rein 12 reaching costa before the end of cell; rein 3 sbortly before end of cell, twice as far from 2 as from 4 ; rein 2 twice as far from end of cell as from base of wing. Hind wing much elongated, outer margin sinuate : vein 7 well before end of cell, trice as far from 8 as from 6 ; vein 3 immediately before end of cell; vein 2 twice as far from base of wing as from end of cell.

In the type species vein 5 of the hind wing is well developed, but it is barely traceable in the otber species of the genus.

Hind tibire with two pairs of spurs. In the male the hind tibire are fringed along their upper edge, and the inner side of the tibire is clothed with long coarse recumbent hairs.

Closely allied to Daimio, from which it may be separated by the shape of the wings, especially of the hind wing, by the much greater length and more decided hook in the terminal portion of the antennal club, and by the scaling of the hind tibix of the male.

A syuopsis of species is appended.


Entirely confined to Asia.
Satarupa dohertyt, sp. nor.
Upperside dark brown. Fore wing with a series of seren transparent spots, three subapical and minute, the remainder in pairs in echelon to the submedian, there followed by an opaque white streak on inner margin. Hind wing with a broad white central band, outwardly bordered by a series of black spots; cilia chequered. Underside as abore, but paler; the white band on hind wing of much greater extent, occupying the whole of the wing, with the
exception of a marginal band and a short costal streak; a series of black spots inside marginal band, and an isolated black spot at costal bifurcation. Abdomen above entirely white, beneath greyish white.
Palpi dark above, grey below; legs grey.
IIab. Kumaon. Expanse 52 millim.
Closely allied to S. sambara and S. afinis. From the former it differs in its larger size ( 52 to 46 millim.), wholly white abdomen, and white base to hind wing on underside ; from the latter it differs in the colour of the abdomen and in the lower spot of the central pair on the disk being nearer than the upper spot to the base of the wing, while in affinis the lower spot is nearer to the onter margin.

This is probably the species recorded from Kumaon by Mr. Doherty, after whom I have much pleasure in naming it.

## 5. Geuus Damio.

Daimio, Murray, Eut. Mon. Mag. vol. xi. p. 171 (1875). Type, tethys, Mén.
Antennæ: club moderate, terminal crook bent at about right angles. Palpi porrect; third joint short, obtusely conical. Fore wing: outer margin slightly oblique; inner margin longer than outer margin ; cell less than two-thirds the length of costa; vein 12 reaching costa hefore the end of cell ; discocellulars suberect; rein 3 close to end of cell, more than twice as far from 2 as from 4 ; vein 2 twice as far from end of cell as from base of wing. Hind wing hardly elongated, outer margin sinuate; vein 7 shortly before end of cell, more than twice as far from 8 as from 6 ; discocellulars very faint, almost crect; vein 5 barely traceable; vein 3 shortly before end of cell; vein 2 twice as far from base of wing as from end of cell. Hind tibie with two pairs of spurs.

Male without costal fold, but with a tuft of lairs attached to the proximal end of hind tibic.

A synopsis of the species is given below.

[^7]
## 6. Genus Erites.

Erites, Mab. Bull. Soc. Ent. Belge, p. Ixxi (1891).
Type, melania, Mab.
Very close to Surangesa, from which it may be separated by the more dentate margin to the hind wing, and by the lower margin of the cell between reins 2 and 3 being straight.
djelelee, WIIgr.
And one unidentified species.
A species closely allied to motozi, Whlgr., had been wrongly identified as djelclice in the British Masemm collection. Therefore all Mr. Butler's records of djalalce really apply to this other species, which is apparently unnamed, and which is in the British Museum from Aden, Wadelai, Somali, and Abyssinia, the true djelwela being represented only from British Caffraria, Cape of Good Hope, Transraal, and Natal.

## 7. Genus Sarangesa.

Sarangesa, Moure, Lep. Ceyl. i. p. 176 (1881).
Type, purendia, Moore.
Hyda, Mabille, Bull. Soc. Ent. Fr. (6) ix. p. clxxxiii (1889).
Type, micacer, Mab.
Sape, Mabille, Bull. Soc. Ent. Belge, p. Ixrii (1891).
Type, lucidellc, Mab.
Anteunæ : club moderate, slightly recurved. Palpi porrect; third joint short, bluutly conical. Fore wing: inner margin longer than outer margin; cell less than two-thirds the length of costa; vein 12 reaching costa well before end of cell ; discocellulars suberect, the lower the longer ; vein 3 shortly before the end of cell; vein 2 nearly three times as far from end of cell as from base of wing; the lower margin of cell slightly arched between the origins of veins $\because$ and 3 . Hind wing: outer margin slightly sinuate; vein 7 very shortly before end of cell ; discocellulars and vein 5 barely traceable; rein 3 immediately before end of cell; vein 2 hardly nearer to end of cell than to base of wing. Hind tibiæ with two pairs of spurs in some species, with a tuft of hairs attached to the proximal end.


Aud seven unidentified species.
The genus Sape has been erected by Mabille for moto $i i$ and its allies, but these species all fall into the genus Sarangesa. The species micacea is one of the many species described by Hewitson which have been redescribed by Mabille.

Asiatic and African.

## 8. Geinus Coladenia.

Coladenia, Moore, Lep. Ceyl. i. p. 180 (1881).
Type, indrani, Moore.
Antennæ: club rather robust, recursed at tip. Palpi porrect ; third joint short, obtusely conical. Fore wing : inner and outer margins subequal ; cell less than two-thirds the length of costa; vein 12 reaching costa well before the end of cell; discocellulars suberect, the lower the longer; vein 3 shortly before the end of cell ; rein 2 more than twice as far from end of cell as from base of wing. Hind wing : outer margin sinuate ; vein 7 very close to end of cell; discocellulars and rein 5 barely traceable; vein 3 immediately before end of cell; vein 2 considerably nearer to end of cell than to base of wing. Hind tibire with tiro pairs of spurs, and in the male with a very long tuft of hair attached to the proximal end.
indrani, Moore ............ I.
tissa, Ioore ...........
fatih, Kollar ............
is one unidentified species.
Asiatic and African.

## 9. Geuus Celenorrhinus.

Celcenorrhinus, Hübn. Verz. p. 106 (1816). Type, eligius, Cramer. Gehlota, Doherty, J. As. Soc. Beng. vol. lviii. pt. 2, p. 131 (1889). Type, sumitra, Moore.
Autennæ: club moderate, recurved at apex. Palpi suberect, terminal joint minute, second joint pressed close against the face. Fore wing: inner aud outer margins subequal ; cell less than two thirds the length of costa; vein 12 reaching costa almost opposite the end of cell; discocellulars suberect, the lower the longer ; vein 3 shortly before the end of cell; vein 2 more than twice as far from eud of cell as from base of wing. Hind wing : outer margin sinuate; vein 7 well before the end of cell, about twice as far from vein 8 as from 6 ; discocellulars faint, erect; vein 5 barely traceable; vein 3 immediately before the end of cell; vein 2 twice as far from base of wing as from end of cell. Hind tibiæ with two pairs of spurs, and in the male with a tuft of hairs attached near the proximal end.

pero, de Nicéville ..... 14.
*pulomaya, Moore ..... 15
pyrrha, de Vicéville ..... 16
maculosa, Felder ..... 17.
*biscriata, Butler ..... 18.

* maculata, Hampson ..... 19.
*meditrina, Hewitson ..... 20.
galemus, Fabr. ..... 21
*boadicea, Hew ..... 22.
lugens, Mab. ..... 23.
proxime, Маb ..... 24
cacus, de Nicéville ..... 25
$\int^{*}$ asmara, Butler ..... 26.consertus, de Nicérille.

| area, Plötz..............$~$ | 27. | *aurivittata, Moore ...... 29. |
| :--- | :--- | :--- |
| dhanada, Muore ....... 28. | molicezi, Wligr. | ......... 30. |

This is a cosmopolitan genus, species belonging to it occurring in Isia, Africa, and Sonth America.

## 10. Genus Ouina.

Odina, Mabille, C. R. Ent. Soc. Belg. p. cxiii (1891).
Type, chrysomelænu, Mab.
Antenuæ moderate, with a slender recurred crook. Palpi : third joint stout, porrect, rather conspicuous. Fore wing: inner margin longer than outer margin; cell less than two-thirds the length of costa; vein 5 nearer to 6 than to 4 ; vein 3 close to the end of cell; vein 2 from close to base of wing. Hind wing : outer margin evell : vein 7 well before end of cell, only slightly nearer to 6 than to 8 : rein 3 immediately before the end of cell; vein 2 nearer to base of wing than to end of cell. Hind tibiz with two pairs of spurs. No secondary sexual characters on wings.

$$
\left\{\begin{array}{l}
\text { hieroglyphica, Butl. ......... } 1 . \\
\text { chrysomelena, Mab. } \\
\text { * decoratus, Hew. ........... } \because .
\end{array}\right.
$$

Confined to the Indian and Malay regions.
The type of this genus is one of the many well-known species recently redescribed by M. Mabille.

## 11. Genus Paramimus.

Paranimus, Hübn. Verz. p. 115 (1816). Type, scurra, Hübı. Autemes : club slight, evenly curved. Palpi porrect, widely separated; third joint short, obtusely conical. Fore wing very elongated; iuner margin very much longer than outer margin; cell of fore wing less than two-thirds the length of costa; vein 12 reaching costa almost opposite the end of cell ; discocellulars erect, the lower the longer; vein 3 shortly before the end of cell, more than twice as far from 2 as from 4 ; vein 2 twice as far from end of cell as from base of wing. Hind wing : outer margin evenly rounded : vein 7 shortly before end of cell; discocellulars and vein 5 barely traceable; rein 3 shortly before end of cell; vein 2 ouly slightly nearer to end of cell than to base of wing. Hind tibire with two pairs of spurs, the upper pair minute. No costal fold in male, but a tuft of hairs attached to the proximal end of hind tibix.


[^8]And two unidentified species.
Confined to tropical America

## 12. Genus Pythonides.

Pythonides, Hübn. Verz. p. 111 (1816). Type, cerialis, Cram. Antenne : club moderate, more or less curved, but not hooked. l'alpi porrect; third joint short, bluntly conical. Fore wing : imener margin considerably longer than onter margin ; costa in some species very strongly arched; outer margin slightly excavated just above outer angle; cell less than two-thirds the length of costa; rein 12 reaching costa before the end of cell ; discocellulars ereet, the lower the longer; vein 3 shortly before the end of cell; vein 2 hardly nearer to base of wing than to end of cell. Hind wing: outer margin evenly rounded; discocellulars and vein 5 barely traceable; vein 3 immediately before the end of cell; vein 2 twice as far from base of wing as froin end of cell. No costal fold in male.

This genus can be dirided into two groups on the characters of the hind tibix.
A. Two pairs of spurs on hind tibiæ, no tuft of hairs in male.


Iod three unidentified species.
B. Only terminal pair of spurs ou hind tibix ; male with a tuft of hairs affixed near proximal end of tibia.


And five unidentified species.
Confiued to tropical America.
(jovianus, Cram. ............ 6.
pscudojovianus, West. pluvius, H.-S. \{fabricii, Kirby 7. \{jovianus, Fabr. pyralina, Mösch.

## 13. Genus Nisoniades.

Nisoniades, Hübn. Verz. p. 108 (1816). Type, bromius, Stoll.
Antemæ: club slender, evenly curved. Third joint of palpi minute, bluntly conical. Fore wing: costa straight, apex rather acute; inner margin considerably longer than onter margin; cell of fore wing less than two-thirds the length of costa; vein 12 reaching costa almost opposite the end of cell; discocellulars slightly inwardly oblique; rein 3 shortly before end of cell, more than three times as far from 2 as from 4 ; vein 2 more than twice as far from eud of cell as from base of wing. Hind wing evenly rounded; vein 7 close to end of cell; discocellulars and vein 5 barely traceable; vein 3 immediately before end of cell; vein 2 slightly nearer to end of cell than to base of wing. Hind tibix fringed, and with two pairs of spurs.

This genus appears always to have an ocellated spot at the end of the cell in fore wing, a character which is more developed in Cyclosemia.
bromius, Stoll.
And two unidentified species.
Confined to tropical South America.

## 14. Genus Cyclosemia.

Cyclosemia, Mab. Pet. Nouv. ii. p. 222 (1878).
Type, heremius, Cramer.
Antemm : club slender, erenly curred. Palpi porrect, third joint short, bluntly conical. Fore wing short and broad, costa slightly convex, apex rounded, outer margin very convex; inner and outer margins subequal ; cell less than two thirds the length of costa; rein 12 reaching costa almost opposite the end of cell; discocellulars suberect, the lower the longer; vein 1 shortly before end of cell, more than twice as far from 2 as from 4 ; wein 2 less than twice as far from base of wing as from end of cell. Hind wing evenly rounded; rein 7 well before end of cell : discocellinlars and vein 5 barely traceable; rein 3 shortly before the end of cell ; rein 2 nearer to end of cell than to base of wing. Hind tibio with two pairs of spurs, and fringed with exceptionally long hairs.


And two midentified species.
Confined to tropical America.

## 15. Gehus Achlyodes.

Achlyodes, Hübner, Verz. 107 (1816). Type, fredericus, Hiibn.
Autennæ: club moderate, slightly bent, tapering to a fine point. Palpi porrect; terminal joint minute. Fore wing: inuer margin considerably longer than outer margin ; no costal fold on fore wing; cell of fore wing less than two-thirds the length of costa; vein 12 reaching costa before the end of cell; discocellulars suberect, the lower the longer: vein 3 immediately before the end of cell; rein 2 less than twice as far from end of cell as from base of wing. Hind wing evenly rounded; vein 7 shortly before the end of cell ; discocellulars and vein $\check{5}$ faint; vein 3 from end of cell; vein 2 hardly wearer to end of cell than to base of wirg. Hind tibio with two pairs of spurs.
ficdericus, Hübn.
And four unnamed species.
Confined to tropical America.

## 16. Genus Trichosemeia.

Trichosemeia, Holland, Ann. Nat. Hist. (6) x. p. 294 (1892).
Type, subolivescens, Holland.
Antennæ: club moderate, evenly curved. Palpi porrect; third joint short, obtusely conical. Fore wing: inuer margin louger than outer margin ; cell less than two-thirds the length of costa; vein 12 reaching costa almost opposite end of cell ; discocellulars slightly inwardly oblique, the lower the longer; rein 3 shortly before end of cell ; rein 2 twice as far from end of cell as from base of wing. Hind wing evenly rounded; vein i rery close to end of cell; discocellulars and rein 5 barely traceable; rein 2 immediately before end of cell; rein 3 considerably nearer to end of cell than to base of ming.

Male: no costal fold ou fore wing, but with a large patch of appressed scales on the upperside of the lind wing, occupring the basal half of the wing from the costa to the middle of cell. The inner margin of the fore wing on the underside is also clothed with modified scales, presenting a silky appearance, and bearing a tuft of hairs attached to the submedian near the base. The hind tibice are flattened, and bear a tuft of hairs attached along their inner surface.
There are three species of this genus in the British Museum from W. Africa, tro being unidentified, and the third being pulvina, Plötz. All these three species present slight modifications in the extent of the sexual patches on both wings, and in pulvina the hind tibie are only fringed, and exhibit no trace of the tibial tuft.

## 17. Genus Tagiades. (Plates I. fig. 9 ; III. fig. 11.)

Tagiades, Mübner, Verz. p. 108 (1816). Type, japetus Cram. Pterygospirlea. Wallgr. Rhop. Caffr. p. 53 (1857).;

> Type, flesus, Fabr.

Antennæ: club slender, bent at about a right angle, terminal portion rather long. Palpi porrect, third joint minute. Fore wing: imer and outer margins subequal; cell less than two-thirds the length of costa; rein 12 reaching costa well before end of cell; discoceltulars suberect, the lower the longer; vein 3 shortly before end of cell, three times as far from 2 as from 4; rein 2 almost twice as far from end of cell as from base of wing ; lower margin of cell between origins of veins 2 and 3 strongly arched. Hind wing evenly rounded; rein 7 well before the end of cell, about twice as far from 8 as from 6 ; discocellulars and rein 5 rery faint; vein 3 shortly before end of cell, twice as far from 2 as from 4; vein 2 considerably nearer to end of cell than to base of wing. Hind tibire fringed, and with two pairs of spurs.

It is quite impracticable to separate Pterygospidea from Tayiades, the only difference being that in flesus the outer margin of the fore wing is slightly excarated just above the outer angle, which is not the case in jupetus; when, howeser, one tries to apply this
difference to other species it is found to be a ramishing quantity, and quite valueless as a generic character.

| \{ flesus, Fabr. ........... |  |
| :---: | :---: |
|  |  |
| insultaris, Mab. |  |
| ravi, Moore |  |
| khasiana, Moore |  |
| * mectana, Moore |  |
| japetus, Cramer |  |
| alica, Moore |  |
| obscurus, Mab. |  |
| distans, Moore |  |
| y ${ }_{\text {ana, M Moor }}$ |  |

And ten unidentified species. There is no doubt that several of the above species will be found to be identical when better series are brought together.

Asiatic and African.

## 18. Genus Eagris.

Eagris, Guenée, iu Maill. Réun. ii. Lép. p. 19 (1863).
Type, sabadius, Gray.
Palpi and neuration of fore wing as in Tagiades. Antenmæ: club more robust and terminal portion shorter. Hind wing: vein 7 nearer to end of cell, and vein 2 nearer to base of wing.

Male with a costal fold on fore wing, and with a tuft of hair attached near the proximal end of hind tibie.

Confined to Africa.

## 19. Genus Anastrus.

Anistrus, Hbn. Ex. Schmett. ii. 1822-26. Type, obscurus, Hbn.
Antemæ: club rather slender, very gradually thickened, bent into an even curve, tip acuminate. Palpi porrect; second joint as seen from above broad, rectangular, closely scaled; third joint minute, bluntly conical. Fore wing : imer and onter margin subequal; cell of fore wing less than two-thirds the length of costa; discocellulars suberect, the lower the longer; vein 3 well before the end of cell, three times as far from 2 as from 4 ; vein 2 more than twice as far from end of cell as from base of wing. Hind wing evenly rounded, slightly lobate; vein 7 shortly before end of cell; discocellulars and veiu 5 faint; rein 3 -immediately before end of cell; vein 2 twice as far from base of wing as from end of cell. Hind tibiæ with two pairs of spurs.

Male with a very slight costal fold, and with a tuft of hair near the proximal end of hind tibix.

$$
\begin{aligned}
& \text { obscurus, Hübn. ......... } \\
& \begin{array}{l}
1 . \\
\text { petius, Mösch. } \\
\text { simplicia, Möseh. ........ } \\
2 . \\
\hline .
\end{array} .
\end{aligned}
$$

And four unidentified species. Corbulo, Cram., has been cousidered
by authors identical with obscurus, Hübnn, but the former is described and figured with two transparent apical spots, which are wanting in obscurus.

Confined to tropical America.

## 20. Genus Camptopleura. (Plate III. fig. 12.)

Camptopleuric, Mab. Pet. Nour. ii. p. 166 (187 ).
Type, therumenes, Mab.
Antennæ: club moderate, evenly curved, finely pointed. Palpi porrect, conspicuous ; third joint stout, bluntly conical. Fore wing: male with a costal fold; costa angled just beyond the fold; cell less than two-thirds the length of costa; vein 12 reaching costa well before the end of cell; discocellulars inwardly oblique, the lower the longer ; vein 3 very close to end of cell; rein 2 twice as far from end of cell as from base of wing. Hind wing evenly rounded; vein 7 shortly before end of cell; discocellulars and vein 5 barely traceable; vein 3 immediately before end of cell; vein 2 considerably nearer to end of cell than to base of wing. Hind tibie with two pairs of spurs, and in the male with a tuft of lairs attached near the proximal end of the hind tibie.
theramenes, Mab. ......
iphicrutes, Mab. ........
chenus, Mab. ..........
che
thrtsybuelus, Fabr. ......
t.

And two unidentified species, one of which is Butler's female type of Achlyodes nyctineme, his male type of which is a female of the genus Pellicia.

Confined to tropical South America.

## 21. Fenus Potamanax, nov.

Type, flavofusciata, Hew.
Antennæ: club rather robust, slightly flattened, evenly curved. Palpi porrect, divergent; third joint rather prominent. Fore wing: costa much arched, inner margin longer than outer margin ; cell of fore wing less than two-thirds the length of costa; vein 12 reaching costa well before the end of cell; discocellulars erect, the lower the longer; vein 3 shortly before the end of cell; rein 2 hardly nearer to base of wing than to end of cell. Hind wing evenly romnded; vein 7 very close to end of cell; discocellulars erect and in the same straight line; vein 5 barely traceable; rein 3 immediately before end of cell; vein 2 more than twice as far from base of wing as from end of cell. Hind tibiæ with two pairs of spurs ; no secondary sexual characters in male.

$$
\begin{aligned}
& \text { * flarofasciata, Hew. ... } 1 . \\
& \text { * thestia, Hew. ............ } 2 . \\
& \text { * latrea, Hewr. ............ } \text {. } \\
& \text { * thorica, Hew. .. .......... } 4 . \\
& \text { unifusciuta, Feld. ...... } \vdots .
\end{aligned}
$$

Confined to tropical South America.

## 22. Genus Mycteris. (Plate III. fig. 13.)

Mycteris, Mab. Pet. Nouv. p. 114 (1877). Type, carula, Mab. Antennæ : club moderate, looked, terminal portion very short. Palpi very prominent, porrect; second and third joint taken together forming an elongated triangle; third joint rapidly tapering, tip bhunt. Fore wing produced at apex ; inner and outer margins subequal ; cell of fore wing less than two-thirds the length of costa; vein 12 reaching costa almost opposite the end of cell; rcin 3 shortly before the end of cell ; vein 2 very close to base of wing ; discocellulars suberect, the lower the longer. Hind wing evenly rounded; vein 7 nearer to 8 than to 6 ; discocellulars and rein 5 faint; vein 3 immediately before end of cell; rein 2 nearer to end of cell than to base of wing. Hind tibix with two pairs of spurs; on costal fold in male, but a short tuft of erectile hairs on upperside of hind wing, attached along vein 8 ; at the bifurcation of vein $\zeta$ the veins at the fork are conspicuously dilated. The position of vein 7 seems quite unique among the Hesperiid genera.

$$
\begin{aligned}
& \text { carula, Mab. ................ } 1 . \\
& \text { * cambyses, Hew. ............ } \\
& \hline
\end{aligned}
$$

And two unnamed species.
Confined to tropical Sonth America.

## 23. Geilus Pellicia.

Pellicia (Plötz, MS.), H.-S. Corresp.-Bl. zool.-min. Verein. Regeus. xxiv. p. 159 (1870). Type, dimidiata, H.-S.
Antenme: club moderate, bent into a hook, terminal portion slender. Palpi porrect ; third joint short, obtusely conical. Fore wing : inner margin shorter than outer margin; no costal fold in male ; cell less than two-thirds the length of costa; vein 12 reaching costa almost opposite the end of cell; discocellulars slightly inwardly oblique, the lower the longer; vein 3 close to end of cell; vein 2 twice as far from end of cell as from base of wing. Hind wing slightly elongated, outer margin inconspicuonsly sinuated; cell very short, extending less than half across the wing ; vein 7 shortly before the end of cell; discocellulars and vein 5 faint; rein 3 from end of cell ; vein 2 about equidistant from base of wing and from end of cell. Hind tibix fringed, and with two pairs of spurs. Male with a tuft of hairs on upperside of hind wing, attached along vein 8 , aud pointing downwards; at the bifurcation of vein 7 that vein and the upper margin of the cell are distinctly swollen for a short distance. This character of the swollen veins was pointed out to me by Mr. Salvin, to whom I am indebted for many valuable suggestions; it also obtains in the genus Mycteris, which, howerer, can be separated readily by the form of the palpi.

> * nyctincme, Butl. ......... 1.
> * castolus, Herr. ............ 2. ithrana, Butl. ............ ?.

And three unnamed species.
In spite of its very different colouring, ithruna appears to be quite
inseparable in structure from nyctineme, and the prehensores of both species are very similar.

Butler's male type of nyctineme is a female, his female type being an unidentified species of the genus Camptopleura; the true male of myctineme does not differ appreciably in markings from the female, though it differs of comrse in the secondary sexual characters of the genus, and also slightly in shape of wings, as in other species of the genus.

Confined to tropical America.

## 24. Gemus Eantis. (Plates I. fig. 10; II. fig. 14; III. fig. 17.)

Eantis, Boisd. Spec. Gén. pl. 9 в (1836). Type, Jusiris, Cram.
Antemne: club very slender, hardly thicker than shaft, evenly curred, terminating in a fine point. Palpi as in Anustrus. Fore wing : apex conspicnously falcate, outer margin very convex ; imer margin slightly longer than outer margin ; cell less than two-thirds the length of costa: rein 12 reching costa at about half its length, considerahly before the end of cell; middle discocellular erect, lower discocellular inwardly oblique, the lower the longer; vein 3 well before end of cell, less than twice as far from vein 2 as from 4; vein 2 nearer to base of wing than to end of cell. Hind wing much produced in median area, giving a very square appearance to the wing ; cell short; vein 7 shortly before the end of cell; discocellulars barely traceable; vein 5 almost invisible; vein 3 shortly before the end of cell, slightly nearer to 4 than to 2 ; vein 2 nearer to end of cell than to base of wing. Hind tibix with two pairs of spurs, and in the male with a tuft of hairs attached near the proximal end.

In the male of busiris there is also a tuft of short hairs on a black silky patch of closely appressed scales at the extreme base of the costal margin on upperside of hind wing, and a precisely similar patch on underside of fore wing at origin of vein 1. This sexmal character is not found in any other species of the genns.

| busiris, Cram. | 1. | \{pallida, Felder |
| :---: | :---: | :---: |
| sebaldus, Fabr. |  | [ozotes, Butler. |
| thraso, IIübn. ........... | $\because$ | mexicana, Felder |
| papiniumus, Poey | . | mithridutes, Fabr. |
| rossine, Butler | 4. |  |

And one unidentified species. Confined to tropical America.

## 25. Genus Antigonus.

Antigonus, Hïbn. Verz. p. 108 (1816). Type, nearchus, Latr. Chetoneura, Feld. Wien. ent. Monat. vi. p. 185 (1862).

Type, nearchus, Latr.
Antenn: club moderate, more or less bent into a curve, sometimes hooked. Palpi as in Anastrus. Fore wing : inner margin very concave; outer angle produced into a lobe; outer margin longer than inner margin ; cell of fore wing less than two-thirds the length
of costa; vein 12 terminating well before end of cell; vein 10 remote from 9 ; reins 7, 8, 9 all from the same spot; discocellulars suberect, the lower the longer; vein 3 shortly before end of cell; vein 2 close to base of wing. Hind wing produced into a tooth at end of vein 7; discocellulars and vein 5 barely traceable; vein 3 immediately before end of cell; vein 2 considerably nearer to end of cell than to base of wing. Hind tibie with two pairs of spurs, upper pair short.

Male with a costal fold, and with a tuft of lair attached near proximal end of hind tibiac.

$$
\begin{aligned}
& \left\{\begin{array}{l}
\text { nearchus, Latr. ...... } \\
\text { ustus, Hübn. } \\
\text { hi,pulus, Feld. }
\end{array}\right. \\
& \left\{\begin{array}{l}
\text { crosus, Hübn. ....... } \\
\text { westermeanni, Latr. }
\end{array}\right.
\end{aligned}
$$

Coufined to tropical America.

## 26. Genus Darpa.

Darpa, Moore, Proc. Zool. Soc. Lond. p. 781 (1865).
Type, hanria, Moore.
Antenne: club moderate, rather elongate, with a short terminal crook; tip sharp. Palpi porrect, third joint almost entirely concealed in clothing of second joint. Fore wing : outer margin very dentate ; inner margin longer than outer margin ; no costal fold in male; cell of fore wing less than two-thirds the length of costa; vein 12 terminating well before the end of cell; discocellulars inwardly oblique, the lower much the longer ; vein 3 shortly before end of cell; vein 2 very close to base of wing, quite three times as far from end of cell as from base of wing. Hiud wing slightly elongate, outer margin strongly dentate; vein 7 very close to end of cell; discocellulars and rein 5 traceable, but not fully developed; vein 3 immediately before end of cell; vein 2 considerably nearer to end of cell than to base of wing. Hind tibie with two pairs of spurs. Hind tibie and femora with very long fringes.

> humia, Moore.

Confined to the Oriental region.

## 27. Genus Sifonades.

Spionudes, Hübn. Verz. p. 114 (1816). Type, artemides, Cramer.
Antennæ: club moderate, crook short, bent at about a right angle; tip acuminate. Palpi porrect, terminal joint almost entirely concealed in the clothing of the second joint. Fore wing: costa strongly arched, apex broadly trimeate; inner margin slightly longer than outer margin ; no costal fold in male; cell of fore wing less than two-thirds the length of costa; vein 12 reaching costa well before the end of cell ; discocellnlars suberect, the lower the longer; vein 3 very close to end of cell; vein 2 more than twice as far from end of cell as from base of wing. Hind wing elongated; rein 7 well before end of cell ; discocellulars and rein 5 barely traceable;
vein 3 immediately before the end of cell; vein 2 considerably nearer to end of cell than to base of wing. Hind tibie with two pairs of long spurs, and in the male with a tuft of erect hairs attached near the proximal end.

In the female the fore wing is much more truncate, and the hind wing is broader, and therefore appears less elongated.
artemides, Cramer.
And an unidentified species. Allied to the Asiatic genus Darpa. Trabitat. Tropical South America.

## 28. Genus Anisochoria. (Plates I. fig. 8: III. fig. 10.)

Amisochoria, Mab. Bull. Soc. Ent. Fr. (5) vi. p. 200 (1876).
Type, polysticta, Mab.
Antennæ rather short, less than half the length of fore wing ; club robust, flattened, curved, terminating in a fine point. Palpi very conspicuons, porrect ; second joint long, densely clothed; terminal joint short, obtusely conical. Fore wing : costa convex at middle, and slightly concare before apex ; apex truncate and slightly excised; inner margin concare ; cell less than two-thirds the length of costa; rein 12 reaching costa well before the end of cell; discocellulars slightly inwardly oblique, the lower the longer; vein 3 immediately before end of cell; rein 2 almost equidistant from 3 and from base of wing. Hind wing: outer marginevenly rounded; discocellulars very faint; vein 5 invisible; vein 3 immediately before end of cell; vein 2 nearer to end of cell than to base of wing. Tind tibire with two pairs of spurs.

Male with a slight costal fold.

| albiplarga, Feld. | 1. | \{peduliodina, Butl. ...... t. |
| :---: | :---: | :---: |
| palpalis, Latr. ........... | $\because$. | $\left\{\begin{array}{l}\text { minstictu, Mah. }\end{array}\right.$ |
| Іепит, Мӧлсһ. ........... | : |  |
| sublimbuta, Mab. |  |  |

Confined to tropical Sonth America.
29. Gemus Procampta.

Procampta, Holland, Amm. Nat. Hist. (6) x. p. 293 (1892).
Type, rara, Holland.
"Allied to Anisochoria, Mab. Body slender. Palpi moderately long, slender, porrect, appressed, with the second article heavily clothed with hairs, and the terminal article slender. Fore wing rounded at base, convex on middle of costa, and slightly concave before apex: apex truncate, outer margin straight; outer angle not rounded, inner margin straight. Posterior wing subpyriform, and rery convex on outer margin." (Holland, l. c.)

This genus agrees exactly with Anisochoria in shape of wings and form of palpi ; the nenration I have had no opportunity to compare. The two genera are hardly likely to be identical, as one is fomed only in South America and the other in Africa.

## 30. Genus Ctenoptilum.

Ctenoptilum, de Nicéville, Journ. Bomb. Nat. Hist. Soc. vol. v. p. 220 (1890).

Type, vasava, Moore.
Antenne : club rather robust, graduall thickened, recurred, finely pointed. Palpi rery conspicuons, porrect ; third joint fairly robust, long, slightly curring downwards, bluntly pointed. Fore wing: costa straight, apex broadly truncate ; immer and outer margins subequal ; cell almost two-thirds the length of costa; vein 12 reaching costa far before the end of cell ; vein 8 usually given out beyond the end of cell-that is, veins 7 and $S$ anastomose for a portion of their basal length (this is not an invariable character ; the length of the anastomosis raries in different specimens, and occasionally, though very rarely, veins 7 and 8 are free for their entire length); discocellulars taken together forming a curre, the lower the longer; vein 3 shortly before the end of cell; rein 2 considerably nearer to rein 3 than to base of wing. Hind wing: outer margin with a tooth-like projection at vein 7 and a second more prominent one at vein 4 ; from this latter projection to the anal angle the margin is perfectly straight, thus giving the wing a very squared appearance. Neuration of hind wing much as in Odontoptilum. Hind tibie with two pairs of spurs, the apper pair minute. Male with a long tuft of hair attached to the proximal end of hind tibie.

$$
\begin{aligned}
& \text { vasava, JLoore .................. } 1 . \\
& \text { multiguttata, de Nicèr. ...... }
\end{aligned}
$$

This genus is closely allied to C'aprona and Odontoptilum; the sharply pointed antemæ, howerer, will at once separate it.

Confined to Asia.

## 31. Genis Tapena.

Tapena, Moore, Lep. Ceyl. i. p. 181 (1881).
Type, thwaitesi, Moore.
Antennæ: club moderate, hooked, tip acuminate. Palpi conspicuous, porrect ; third joint, short, obtusely conical. Fore wing: apex broadly truncate; inner and outer margins subequal ; no costal fold in male; cell less than two-thirds the length of costa; rein 12 reaching costa before the end of cell; discocellulars suberect, the lower the longer; rein 3 shortly before the end of cell; vein ${ }^{2}$ about twice as far from eud of cell as from base of wing. Hind wing : outer margin simuate, produced at vein 3 , giving the wing a squared appearance; rein 7 well before the end of cell ; discocellulars and vein 5 faint; vein 3 immediately before end of cell; vein 2 considerably nearer to end of cell than to base of wing. Hind tibie with two pairs of spurs. Male with a tuft of long hairlike scales attached along the imner side of the hind tibix.

The species agni differs from the type in the outer margins of hoth wings being even, but agrees with it in all other respects.

This genus appears to be closely allied to the Australian genns Netrocoryne.
Confined to the Oriental region.

## 32. Genus Netrocoryne.

Netrocoryne, Felder, Reise Novara, p. 507 (1867).
Type, repanda, Felder.
Antennæ : club rather robust, with a short terminal crook bent at about right angles, tip acuminate. Palpi porrect, rather conspicuous ; second joint long, third joint short, bluntly pointed. Fore wing: apex truncate ; outer margin sinuate, almost half as long again as imer margin; male with a costal fold; cell less than two-thirds the length of costa; reiu 12 reaching costa almost opposite the end of cell ; discoceltulars inwardly oblique and in the same straight liue, the lower considerably the longer; vein 3 well before the end of cell : vein 2 twice as far from end of cell as from base of wing. Hind wing: outer margin sinuate, produced at rein 3, giving a squared appearance to the wing; vein 7 shortly before end of cell; discocellulars and vein 5 traceable but not developed; vein 3 immediately before end of cell: vein 2 twice as far from base of wing as from end of cell. Hind tibiee with a long fringe and with two pairs of spurs, the upper pair minute. repanda, Felder.
According to the description and figure in Scott's 'Australian Lepidoptera' (vol. ii. pt. 2, 1891), there is a long tuft of hairs attached to the proximal end of the hind tibio, which are otherwise almost naked ; this, however, is certainly not the case in some seven males in the collection of the British Museum, in which there is no tuft on the hind tibie, but they are clothed with a long fringe for their entire length; there is, however, a short tuft of hair attached to the proximal end of the hind femora.
This genus is confined to Australia.

## 33. Gehus Odontoptilum.

Odontoptilum, de Nicéville, Journ. Bomb. Nat. Hist. Soc. vol. v. p. 217 (1890).

Type, sura, Moore.
Antemme less than half the length of costa; club rather robust, beut at about right angles, tip blunt. Palpi porrect; third joint short, obtusely conical. Fore wing: costa much arched; apex truncate; inner and outer margins subequal ; cell less than trro-thirds the length of costa; no costal fold in male; vein 12 reaching costa well before the end of cell; discocellulars inwardly oblique, in the same straight line, the lower the longer ; vein 3 well before end of cell; vein 2 slightly nearer to base of wing than to vein 3 . Hind wing: outer margin with a tooth-like projection between reins 6 and 7 ; vein 7 well before end of cell; discocellulars and vein 5 distinctly traceable but not fully developed; vein 3 immediately before end of
cell; vein 2 only slightly nearer to end of cell than to base of wing. IIind tibie with two pairs of spurs. Male with a dense recumbent tuft of hairs attached to the proximal end of the fore coxæ.

The species pygela differs from the type in having a second toothlike projection at the extremity of vein 4.

$$
\begin{aligned}
& \{\text { angulata, Felder ... } 1 . \\
& \text { \{sura, Moore. } \\
& \text { helius, Felder ......... } \quad \because . \\
& \text { *pygela, Hew. .......... } 8 . \\
& \text { *leptogramma, Hew. . } 4 .
\end{aligned}
$$

Helius, Felder, is a quite distinct species from sura, with which it has been confused. This genus has little in common with either Ar:hlyodes or Antigonus, with which it has been associated.

Confined to Asia.
34. Gelius Caprona. (Plates I. fig. 12; III. fig. 15.)

Caprona, Wallgr. Rhop. Caffr. p. 51 (1857).
Type, pillaana, Wallgr.
Abaratha, Moore, Lep. Ceyl. vol. i. p. 181 (1881).
Type, ransonnetii, Moore.
Antemm less than half the length of costa; club rather robust, abruptly thickened, and bent at about a right angle, tip blunt. Palpi porrect ; second joint thickly scaled, third joint short ; almost concealed. Fore wing : apex slightly truncate; cell less than twothirds the length of costa; discocellulars inwardly oblique, the lower the longer, more oblique, and slightly arched; vein 3 shortly before end of cell; vein 2 only slightly nearer to base of the wing than to 3 . Hind wing: outer margin sinuate, produced at vein 2 , giving the wing a squared appearance; discocellulars and vein 5 barely traceable; rein 3 shortly before end of cell; rein 2 much further from base of wing than from end of cell. Hind tibiæ with two pairs of spurs. Male with a radiating tuft of hairs attached to fore cosx.

The species canopus differs considerably from the type, the cell ol fore wing being broader, the discocellulars less oblique, the apex very truncate, and the outer margin of hind wing much more irregular. The male also wants the tuft of hair on the fore coxe. The Asiatic species, however, agree entirely with the type.

The genns Abaratha must sink as a synonym of Caprona, there being no perceptible structural differences between the types.


And one unidentified species.
This genus is closely allied to Odontoptilum.
Asiatic and African.

## 35. Genus Leucochitonea.

Leucochitunea, Wallgr. Rhop. Caffr. p. 52 (1857).
Type, levubu, Wallgr.
Antenne less than half the leugth of costa; club moderate, less robust than in Abantis, recurved, tip blunt. Palpi porrect ; second joint short ; third joint long, slender, bluntly pointed. Fore wing : inner and outer margins subequal ; no costal fold in male; cell less than two-thirds the length of costa; vein 12 reaching costa well before the end of cell; discocellulars inwardly oblique, the lower the longer; vein 3 shortly before end of cell; vein 2 only slightly nearer to base of wing than to vein 3 ; lower margin of cell arched between reins 2 and 3 . Hind wing not conspicuously elongated; outer margin slightly sinuate; rein 7 shortly before end of cell; discocellulars and vein 5 barely traceable; vein 3 immediately before end of cell; vein 2 considerably nearer to end of cell than to base of wing. Hind tibie with two pairs of spurs, the terminal pair considerably the longer. In the male there is a conspicuous tuft of radiating hairs affixed to the fore cosæ. Female with a dense tuft of closely set hairs at extremity of abdomen.

Trimen considers this genus identical with Abuntis, and that the differences between the two general pointed out by him are not sufficient for generic separation. The type is the only known species of the genus; the numerons New-World species put in the genus by various authors in no way belong to it.

Tevulu, Wallgr.
Confined to Africa.

## 36. Gemus Abantis. (Plate IIf. fig. 16.)

Abentis, Hopff. Verh. Akad. Wiss. Berl. p. 643 (1855).
Type, tettensis, Hop ff.
Saprea, Plütz, Stett. ent. Zcit. vol. xl. p. 177 (1879).
Type, bicolor; Trim.
Antenne short, less than half the length of costa ; club robust, sharply recurved, tip blunt. Palpi porrect; third joint short, obtusely conical. Fore wing: inner and outer margins subequal ; no costal fold in male ; cell less than two-thirds the length of costa; vein 12 reaching costa well before the end of cell ; discocellulars strongly inwardly oblique, the lower the longer ; rein 3 immediately before end of cell; vein 2 slightly nearer to base of wing than to end of cell. Hind wing rather elongated, less conspicnously in the female; outer margin slightly excarated at vein 5 ; vein 7 shortly before end of cell; discocellulars outwardly oblique; vein 5 traceable but not fully developed; vein 3 immediately before end of cell; veiu 2 nearer to end of cell than to base of wing. Hind tibiæ fringed and with two pairs of spurs, the upper pair minute.

| tettensis, Hopff. ................. | 1. |
| :--- | :--- | :--- |
| bicolor, Trim. <br> paradisea, Butl. ......................... <br> 3 |  |

Trimen notes that the epiphysis on the fore tibie appears to be
occasionally wanting in tettensis. In the only two specimens (both males) in the British Museum the epiphysis is very small, if not absent, but it is impossible to say with certainty without "clearing" the fore leg.

Confined to Africa.

## 37. Genus Heliopetes.

Heliopetes, Billb. Enum. Ins. p. 81 (1820). Type, arsulte, Linn. Leucoscirtes, Scudd. Syst. Rev. p. 52 (1872).

Type, ericetorum, Boisd.
Antenuæ : club moderate, blunt, slightly curved. Palpi porrect; second joint lasly clothed with long scales; third joint slender, hluntly conical. Fore wing: imner and outer margins subequal; cell of fore wing less than two-thirds the length of costa; vein 12 reaching costa well before the end of cell; discocellulars suberect, the lower the longer; rein 3 close to end of cell, more than three times as far from 2 as from 4 ; vein 2 three times as far from end of cell as from base of wing. Hind wing eveilly rounded; vein 7 shortly before end of cell ; discocellulars and vein 5 very faint ; rein 3 immediately before end of cell; vein 2 nearer to base of wing than to end of cell.

Male with a costal fold and with a tuft of hairs attached near proximal end of hind tibio.

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| figara, Butler |
| :---: |
| $\left\{\begin{array}{c} \text { petrus, Hübn. } \\ \text { "laginia, Hew. } \end{array}\right.$ |
| *lencola, Hew |

38. Genus Hesperia. (Plates I. fig. 11 ; III. fig. 19.) Hesperiu, Fabr. Ent. Syst. iii. vol. i. p. 258 (1793).

Type, malva, Linn.
Pyrgus, Hübn. Verz. p. 109 (1816). Type, syrichtus, Fabr.
Scelothrix, Ramb. Cat. Lép. Andal. i. 1. 63 (185S).
Type, carthami, Hübu.
Syriclitus, Boisd. Icones, p. 230 (1832-33). Name sinks, being ilerived from species in genus.

Antemex : club robust, arcuate, blunt at the tip, no terminal crook. Palpi suberect ; second joint lasly clothed with longish scales; third joint slender, blunt, almost concealed in scaling of second joint. Fore wing: inner and outer margins subequal ; cell less than twothirds the length of costa ; vein 12 reaching costa well before the end of cell ; discocellulars suberect, the lower the longer; vein 3 shortly before end of cell, more than twice as far from 2 as from 4 ; vein 2 nearer base of wing than to end of cell. Hind wing usually evenly rounded, occasionally slightly crenulate; vein 7 very shortly before end of cell; discocellulars and vein 5 very faint; vein 3
immediately before end of cell ; veiu 2 nearly equidistant from base of wing and end of cell. Hind tibix with tivo pairs of spurs.

This genus may be conveniently divided into groups on the male secondary sexual characters.

Section A.-Male withont costal fold and without tuft of
hairs on hind tibia.

| spio, Linnæus ........... 1. | asterodia, Trim. |
| :---: | :---: |
| sataspes, Trimell ......... $\frac{2}{3}$ |  |
| hellas, de Nicéville. | transcaalice, Trim. ...... 10. |
| galba, Fabr. .............. 4. | orbifer, Latr. ............ 11. |
| * superna, Moore. | \{ sao, Bergstr. ............ 12. |
| * evanidus, Butler ........ 5. | var. therupne, Rbr. |
| *rar. adcnensis, Butler. | phlomides, H.-S. ........ 13. |
| diomus, Hopff. ........... 0. | *geron, n . sp. .............. 14. |

The above group includes all the African, most of the Asiatic, and a few of the European species of the genus, and is not found in the New World.

Section B.-Male with a costal fold; no tuft of hairs on the hind tibia, but with these tibir furnished with numerous short spines. cribrellum, Evers.
15.

Section C.-Male with a costal fold, but with no tuft of hairs on hind tibiæ.

| tesscllum, Hübn. ......... 16. gigas, Brem. | \{ syrichtus, Fabr. ......... 22. |
| :---: | :---: |
| nomas, Led. .............. 18. |  |
| poggei, Led. ............... 19. | $\{$ tcssellata, Scud. |
| proto, Esp. .............. 20. | commuais, Grote. |

This group is confined to the New World, Europe, and Central Asia. There is a single male of $H$. poggei in the British Muscum obtained by the writer at Quetta, Biluchistan; but this is the only species which ranges into the Indian region. The specimen above referred to, though agreeiug best with poggei on the upperside, appears nearer to proto in size and in the markings of the underside.

## Section D.-Male with a costal fold and with a tuft of hairs on hind tibie.

cashmirensis, Moore ...... 24.
cacalice, Ramb. ............ ©.5.
\{ scrratula, Ramb. ......... Dt.
rar. crecus, Freyer:
$\left\{\begin{array}{c}\text { alveus, Hübn. .......... } \\ \text { var. onopordi, Ramb. }\end{array}\right.$
var. carline, Ramb.
var. cirsii, Ramb.
andromeda, Wallgr....... 28.
\{centaurere, Ramb.|......... 29.
\{ wyandot, Edw.
hypoleueos, ILed.30

This group occurs in Europe, Asia, and the New World.
Proc. ZooL. Soc.-1893, No. V.

All the species of this genus in which the male has a tuft of hairs on the hind tibire also are provided with a " pair of scabbard-shaped scaly and hairy appendages, springing posteriorly from the breast at the base of the hind legs and about one third the length of the abdomen." These appendages will be found to be present in the males of all genera which are provided with tufts on the hind tibio, and when the hind legs are drawn up the tuft is inserted between the appendage and the base of the abdomen.
This is a genus which needs splitting up; but a further knowledge of the earlier stages is necessary to do it satisfactorily.

## Hesperta geron, sp. hov.

Upperside dark brown, almost black, spotted with white. Fore wing with a few grey scales at base of wing and along imer margin ; a longitudinal white spot at base of cell, a broad square spot extending across the centre of cell, and a crescent-shaped spot closing cell ; an oral spot on submedian; a submarginal row of eight white spots across wing beyond cell, the upper four coalescing, the first three large, the fourth small, the fifth triangular, equal in size to and immediately below the fourth, the sixth square, twice the size of the fifth, nearer the base of the wing, the serenth and eighth rectangular, almost equal in size, larger and nearer to the base of the wing than the sixth, the eighth placed immediately below the serenth, which is immediately below the crescent-shaped spot closing cell; a marginal row of eight white dots. Hind wing with a large rounded spot closing cell and three more spots coalescing with it and with each other extending towards the inner margin as far as the submedian ; a small spot at base of cell and a marginal row of six white dots; inner margin clothed with long whitish hairs; all above spots white. Cilia of both wings chequered. Underside: fore wing as above, the costal margin and apex suffused with greenish white; hind wing: ground-colour ochraceous yellow; spots as above, but with an additional large spot in the marginal row, situated at the apex of the wing, and an extra siot in the discal row situated between the costal and subcostal nervures just above the subcostal bifurcation. Thorax and abdomen above black; last few segments of abdomen whitish. Palpi and abdomen beueath greyish white. Antennæ: shaft grey above, white beneath; club black, tip white.

Expanse 31 millim.
Nearest to H. phlomidis, H.-S., from which it differs in its smaller size, more extended white markings on the fore wing above, but chiefly in the colour and markings on the underside of the hind wing; in phlomidis the ground-colour is sap-green, in geron ochraceous yellow: in the former the large spot above the subcostal bifurcation unites with the discal row and also is broadly diffused above the costal nervure along the costa to the base; in the latter the large spot above the subcostal bifurcation is well separated from the spot at end of cell and does not extend abore the costal nerrure.

Described from six specimens collected by me at Quetta, Biluchistan, in June. . There is also a single specimen in the collection
of the British Museum from Shahrud, Persia, labelled with the manuscript name of geron, Zeller, which name I have therefore adopted.

## 39. Genus Gomalia.

Gomalia, Moore, P. Z. S. 1879, p. 114.
Type, albofasciata, Moore.
Antennæ and palpi as in Hesperia, except that the club of antennæ is slender and straight. Male with a costal fold. Differs from Hesperia in neuration only in vein 2 being slightly nearer the base of the fore wing. Hind tibix with two pairs of spurs ; but with no tuft in the male.

> albofasciata, Moore.
> *litoralis, Swinhoe.
> elma, Trimen.

And one unnamed species. Elma is rery close to albofasciata; but the series in the British Museum is not sufficient to decide whether they are identical.

Ásiatic and African.

## 40. Genus Carcharodus.

[Urbanus, Hiibuer, Tentamen, r. 1 (1806).]
Carcharodus, Hübner, Verz. p. 110 (1816).

> Type, alcece, Esp.

Type, lavatera, Esp.
Spilothyrus, Dup. Pap. France, Diurn. Suppl. p. 415 (1832).
Type, alсесе, Esp.
Antennæ : club rather robust, straight, with an extremely minute blant crook. Palpi suberect; third joint rather prominent; second joint rather laxly scaled. Fore wing: inner and outer margins subequal ; male with a costal fold; cell of fore wing less than two-thirds the length of costa; rein 12 reaching costa well before the end of cell; discocellulars suberect, the lower the longer; vein 3 shortly before the end of cell, twice as far from 2 as from 4; rein 2 twice as far from end of cell as from base of wing. Hind wing : outer margin crenulate; vein 7 more than twice as far from 8 as from 6 ; discocellulars and vein 5 faint; rein 3 well before end of cell; vein 2 distinctly nearer to base of wing than to end of cell. Hind tibiæ fringed, and with two pairs of spines, the upper pair minute.

This genus can be conveniently divided into two groups, in one of which the male has a tuft of hairs on the underside of the fore wing which is wanting in the other.

Section A.-No tuft of hairs on underside of fore wing in male.

| lavatere, Esp. ................ 1. | *alcea, var. nostras, Zell. . 2 a. |
| :---: | :---: |
| [alcear, Esp. ..... ........... 2. | *alcee, var. australis, Zell. 2 b. |
| malvarum, Hoffm. | *swinhoei, sp. n. ........... 3. |

> Section B.-Male with a tuft of hairs at base of fore wing on underside.

As the publication of the 'Tentamen' is more than doubtful, the generic name Urbanus is ignored.

Range. Europe, Asia, and Africa.
Carcharodus swinhoei, sp. nor.
Closely allied to alcere, Esp., of which it is probably a local race. On the upperside it differs in its much more olive-green tone, being entirely without the red suffusion which is invarjably present in alcece and its two varieties austratis, Zeller, and nostras, Zeller. On the fore wing the transparent spots are much more conspicuous, and on the hind wing the pale markings of the underside show through much more conspicnously. The dark markings of the fore wing also show up much less conspicuously, the whole being more uniform in colour. On the underside the colouring is considerably colder in tone, lacking the warm-brown suffusion of alcea and its rarieties, being irrorated instead with greenish grey.

Expanse 28 millim.
There are numerous specimens of this species in the British Museum from Biluchistan, Afghanistan, and Thundiani, N.W. Iudia.

This species has hitherto been ilentified as althere, Ramb., var. murvubii, Ramb., which, however, belongs to a different section of the genus, in which the male is furnished with a tuft of hairs on the underside of the fore wing. The only other species of the genus vecurring within Indiau limits is dravira, Moore, which belongs to the althece group of the genus.

## 41. Genus Pholisora.

Pholisora, Scudder, Syst. Rev. Am. Butt. p. 51 (1872). Type, catullus, Fabr.
Pholisora, Scudder, Butt. New England, p. 1514 (1889).
Antennæ: club very gradually thickened, bent at a little more than a right angle, tip blunt. Palpi porrect; second joint loosely scaled; third joint slender, rather conspicuous, bluntly conical. Fore wing: inner margin considerably longer than outer margin; cell less than two-thirds the length of fore wing; male with a costal fold; discocellnlars suberect, the lower the longer; vein 3 immediately before the end of cell, many times further from 2 than from 4 ; vein 2 close to base of wing. Hind wing: vein 7 shortly before end of cell ; discocellulars and vein 5 very faint ; vein 3 immediately before the end of cell; vein 2 slightly nearer to base of wing than to end of cell. Hind tibiæ with two pairs of spurs.

$$
\begin{aligned}
& \text { catullus, Fabr. .............. 1. } 1 \text { velusquez, Luc. ............ シ̈. } \\
& \text { hayhurstii, Edr. ......... 2. | chloracephala, Latr: ...... } 4 .
\end{aligned}
$$

And seven unidentified species.
Confined to America. pointed. Palpi porrect; second joint laxly clothed; third joint almost concealed, bluntly conical. Fore wing: inner margin longer than outer margin ; male with a costal fold; cell of fore wing less than two-thirds the length of costa; discocellulars slightly inwardly oblique, the lower the longer; vein 3 shortly before the end of cell; vein 2 slightly nearer to base of wing than to end of cell. Hind wing: outer margin erenly rounded; rein 7 rery close to end of cell; discocellulars and vein 5 faint ; vein 3 immediately before end of cell; vein 2 almost equidistant from end of cell and base of wing. Hind tibiæ fringed and with two pairs of spines, the upper pair minute.

This genus as it stands at present includes many species which are certainly not congeneric. The above description is taken from the type species.


Found in Europe and North America.

## Subfamily III. Pamphiline.

## Section A.

Antemar rery varied, never much hooked, and usually sharply pointed. In all the genera in which the tip of the antennæ is blunt the epiphysis on the fore tibia is wanting, excepting in one or two Australian forms.

Palpi: third joint usually short and inconspicuous, in some few genera long and slender; in these it is also always erect and never porrected horizontally in front of the face.

Fore wing: cell always less than two-thirds the length of costa ; vein 5 slightly nearer to 4 than to 6 , except in some aberrant Australian forms, in which it is slightly nearer to 6. Hind wing never with a conspicuous tail or tooth, though frequently more or less lobate; veiu 5 never well developed.

Male nerer with a costal fold and only comparatively seldom with a discal stigma on the fore wing; frequently with glandular patches and tufts of hair on the wings ; never with a tuft on the hind tibir.

The epiphysis on the fore tibix and the medial pair of spurs on the hind tibiæ are occasionally wanting.

Confined almost entirely to the Old World. As far as is known the species of this group rest with their wings raised over their backs, assuming that position immediately on settling.

## Section B.

Antennæ very varied, but never hooked; the club either entirely without, or with a crook of varging length. Palpi: third joint in several genera long, slender, and curving over the vertex, a character never found in the Hesperiince; in most of the other genera the third joint is minute, only rery rarely being horizontally porrected, and when this is the case it is always stout.

Fore wing : cell invariably less than two-thirds the length of costa; vein 5 curves downwards at its base and consequently arises considerably nearer to 4 than to 6 ; the middle discocellular being considerably longer than the lower one, frequently more than twice as long as it. Hind wing usually rather elongate, but never with a conspicuous tail or tooth; vein 5 very rarely dereloped.

The male is frequently furnished with a discal stigma on the fore wing and never with a costal fold. Both pairs of spurs are invariably present on the hiud tibio, and there is never a tuft of hair on the tibie in the male. The epiphysis on the fore tibiæ is invariably present.
This group is of world-wide distribution ; the South-American forms, howerer, are comparatively few.
The majority of the species when sunning on a leaf depress their hind wings and elevate their fore wings, an attitude peculiar to this section. When in a complete state of repose both the wings are raised till they meet over their hacks.

## Section C.

Antenur: club of varying robustness, always tapering to a fine point; occasioually hooked, in which case the terminal portion is always more than half the length of remainder of club. Palpi: second joint upturned, pressed closely against the face ; thirt joint long, slender, naked, porrect, projecting horizontally in front of the face. Cell of fore wing rauging from just over one-half to just over two-thirds the length of costa. Hind wing more or less lobate; rein 5 of hind wing usually well developed; vein 5 of fore wing equidistant from 4 and 6 or slightly nearer to 6 .

Male never with a costal fold on fore wing, but with varions ot her secondary sexual characters, both on wings and legs.

As far as is known, all the species rest with their wings raised above their backs, frequently settling on the underside of leaves. They are. remarkably crepuscular in their habits, being specially active only in the very early morning and at dusk. The section is confined entirely to the Old World.

The palpi of this section are very distinct, aud readily separate them from nearly all other genera. The few genera of Hesperiince (Phanus, Entheus, and allies) which have somewhat similar palpi differ in the entirely different form of antennæ, in the constant absence of rein 5 of the hind wing, and in some cases by the presence of the costal fold of the fore wing.

## Synopsis of Genera of Pamphiline. Section A.

* $a$. Vein 5 of fore wing slightly nearer to 6 than to 4 .
$a^{1}$. Tip of antennæ blunt. Motisingha, g. n. Type, dirphia, Hew. (1)
$b^{2}$. Tip of antennæ acuminate,
$a^{2}$. Club of antennæ areuate, with no distinct terminal crook.
Telesto, Boisd. Type, perronii, Latr. (2)
$u^{2}$. Clnb of antennæ with a distinet terminal crook.
$a^{3}$. Male with a diseal stigma on fore wing.
Mrsperilia, Hew. Type, omata, Leach. (3)
$z^{3}$. No discal stigma on fore wing of male.
$a^{2}$. Antennal erook short.
Patlasingha, g. n. Tspe, phigalia, Hew. (4)
$L^{4}$. Antennal crook long.
Trapezites, Hiibn. Type, symmonus, Hübn. (5)

4. Vein 5 of fore wing not nearer to fi than to 4 , usnally distinetly nearer to 4 than to 6 .
$a^{2}$. Epiphysis on fore tibir present.
$u^{2}$. Third joint of palpi long, slender, erect, curving over the vertex.
$a^{3}$. Yein 2 of hind wing eomsiderably nearer to end of cell than to base of wing.
$a^{1}$. Vein 11 of fore wing not touching vein 12.
$a^{j}$. Vein 3 of fure wing well before the end of cell, and rein 3 of hind wing from before end of eell.
$a^{6}$. Vein 2 of fore ming nearer to base of wing than tuend of cell. Scistcs, Moore. Type, gremius, Fabr. (6)
$u^{3}$. Vein 2 of fore wing nearer to end of cell than to base of wing. Aeleros, Mab. Type, leucopyga, Mab
$l^{5}$. Vein 3 of fore wing immediately before end of cell and rein 3 of hind wing from end of cell.

Lamprix, g. n. Type, salsala, Moore. (s)
$6^{2}$. Tein 11 of fore wing touching vein 12 for a portion of its
length.
Korutialalos, g. n. Type, hector, sp. n. (9)
1,3 . Vein 2 of hind wing not nearer to end of cell than to base of wing.
$a^{\prime}$. Fore wing produced apically.
Oxypalpts, g. n. Type, ignita, Mab. (10)
$b^{3}$. Fore wing not produced apically.
Tenominnts, g. n. Type, watsoni, Holl. (11)
$b^{2}$. Terminal joint of palpi short and ineonspicuous.
$a^{3}$. Vein 11 of fore wing free.
$a^{4}$. Veins 2 and 3 of hind ming not swollen in the male.
$a^{5}$. Male with an oval glandular pateh on upperside of hind wing.

Osmodes, g. n. Type, laronia, Hew. (12)
$l^{\circ}$. No glandular patch on upperside of hind wing in the male.
$a^{6}$. Costa of fore wing straight, slightly excised before apex.
$a^{\top}$. Vein 3 of hind wing from before end of cell.
Dutleria, Kirby. Trpe, exornatus, Feld. (13)
$b^{7}$. Tein 3 of bind wing from end of cell.
Amblyscirtes, Se. Type, dialis, Edw. (14)
$b^{\prime}$. Costa of fore wing not excised before apex.
$a^{7}$. Vein 2 of fore wing considerably nearer to end of cell than to base of wing.
$a^{4}$. Tein 3 of hind wing from before end of cell.
$a^{9}$. No tuft of hairs on underside of tore wing in male.
Aeliominues, de Nieé. Type, stigmata, Moore. (15)
b. Male with a tuft of bairs on underside of fore wing. Sebastonjua, g. n. Type, dolopia, Hew. (16)
$b^{\gamma}$. Vein 3 of hind wing from end of cell.
Pedestes, g. n. Type, masuriensis, Moore. (17)

* This group is confined entirely to the Australian region.
$b_{i}^{\top}$. Vein 2 of fore wing not at all or or only slightly nearer to end of cell than to base of wing.
$a^{q}$. Small forms. Tein 7 of hind wing considerably nearer to 6 than to 8 .
u'. No discal stigma on fore wing of male.
$a^{10}$. No glandular streaks on upperside of fore wing in male, and cilia at anal angle of hind wing of normal length. Antenne moderate.
$"^{11}$. Fore wing apically produced in male, outer margin rert oblique, almost equal to inner margin.
"12. Vein 3 of hind wing from before ent of eell.
$a^{13}$. Third joint of palpi horizontal.
Arvetta, g. n. Type, atłimsoni, Moorc. (18)
${ }_{2}, 13$. Third joint of palpi ereet.
Hranotis, Moore. Type, adrastus, Cram. (19)
1, ${ }^{12}$. Tein 3 of hind wing from end of cell. Hyponeucis, Mab. Type, tripuncta, Mab. (20)
, ,11. Fore wing not produced apically, outer margin hardly oblique, considerably shorter than inner margin. $a^{12}$. Third joint of palpi erect. Isoteinox, Felder. Trpe, lamprospitus, Feld. (21) $b^{12}$. Third joint of palpi horizontal.

Isma, Distant. Type, obscura, Dist. (20)
$\beta^{10}$. No glandular streaks on upperside of fore wing in male, but cilia at anal angle of hind wing very much elongated. Antennæ exceptionally long.

Lophondes, g. n. Type, iapis, de Nicé. (23)
$r^{10}$. Male with two pairs of glanclular streaks along reins at base of fore wing on uppersicle.

Zngraphetus, g. n. Type, satwa, de Nicé. (24)
$b^{9}$. Male with a linear discal stigma on fore wing.
Mitapa, Moore. Type, aria, Moore. (25)
$h^{2}$. Large forms Vein $\tau$ of hind tring almost equidistant fiom 6 and 8 .

Erionoti, Mab. Type, thrax, Linv. (27)
3 . Yeins 2 and 3 of the hind wing much swollen in the male.
$n^{\prime}$. No discal patch of specializect seales on uppersicle of fore
wing in male. Gaygara. Moore. Type. thyrsis, Fabr. (2s)
$l^{3}$. Male with a discal patch of specialized seales on upper-
side of fore wing. Padoza, Dist. Type, Tcladea, Hew. (26)
1,3. Vein 11 of fore wing touching 12 for a portion of its length.
Sascrs, de Nicé. Type, sulufusciutus, Moore. (29)
1, No epiphysis on fore tibiz.
$a^{2}$. Anlenua moderate, more than half the length of costa.
Angopteros, g. n. Type, aurcipemis, Blanch. (31)
$\ell^{2}$. Antemne short, less than half the length of costa.
$r^{3}$. Tein 11 of fore wing free.
$\pi^{1}$. Club of antennæ arcnate, tip acuminate.
Ermesia, Feld. Trpe, semiargentcu, Feld. (\%)
li. Club of antenur straight, tip blunt.
$a^{5}$. Vein 3 ol fore wing well before end of cell, rein 2 nearer to base of wing than to end of cell.

Heteropterts, Dum. Type, morphcus, Pall. (32)
$b^{5}$. Tein 3 of fore wing immediately before the end of cell, vein 2 nearer to end of cell than to base of wing.

Pamplila, Fabr. Type, palemon, Pall. (3:)
$l^{3}$. Tein 11 of fore wing running into 12 .
Cyclopides, Hübn. Type, metis, Linn. (34)

1. Genus Motasingha, nov. (Plate III. fig. 23.)

## Type, dirphia, Hew.

Antennæ: club very robnst, bent at right angles with shaft, tip blunt. Palpi as in Telesto. Fore wing: inner margin slightly longer than outer margin ; cell less than two-thirds the length of costa; rein 12 reaching costa shortly before the end of cell; upper discocellnlar short but distinct, outwardly oblique, middle and lower discocellnlars inwardly oblique, the former very faint, the latter well developed; rein 5 slightly nearer to 6 than to 4 : vein 3 well before the end of cell, about twice as far from 2 as from 4 ; vein ? slightly nearer to end of cell than to base of wing. Hind wing slightly elongated, outer margin even ; yein 7 far before the end of cell ; discocellulars and vein 5 very faint; veins 1,2,3, and 4 all close together, vein 3 nearer to 4 than to 2 ; lower margin of cell angled slightly at vein 2 and more abruptly at rein 3 . Hind tibia with two pair of spurs. The female does not differ from the male in neuration.

Male with a linear discal stigma lying almost at right angles to the imner margin, extending from just beyond the lower angle of cell and just below rein 1.

> *dirplia, Herr.
> trimaculata, Tepper. o'.
> quadriincrilata, Tepper.

Confined to Australia.

## 2. Genus Telesto. (Plates II. fig. 7 ; III. fig. 22.)

Telesto, Boisd. Voy. Astrol. 164 (1832). Type, perronii, Latr.
Antennæ: club rather robust, arcuate, with mo terminal crook, tip acuminate. Palpi porrect; third joiut short, obtusely conical. Fore wing rather pointed at apex; outer margin nearly straight: imner margin slightly longer than outer margin; cell less than twothirds the length of costa ; discocellulars inwardly oblique, subequal ; vein 5 almost equidistant from 4 and 6 , slightly nearer to 6 ; vein 3 well before end of cell, slightly further from 2 than from 4; vein? almost equidistant from end of cell and base of wing. Hind wing slightly elongated, outer margin eren; rein 7 equidistant from (i; and 8; discocellulars faint ; veins 2,3 , and 4 all close together; vein 3 nearer to 4 than to 2; lower margin of cell bent abruptly upwards at vein 3. Hind tibie with two pairs of spurs.

Male with an oblique linear streak on fore wing, extending from just beyond the lower cell almost to the inner margin. The female does not differ perceptibly from the male in neuration.

$$
\left\{\begin{array}{l}
\text { perronii, Latr. } \\
\text { lochii, Feld, } \\
\text { doclea, Hew. }
\end{array}\right.
$$

Confined to Australia.

The following Australiau species belong to undescribed genera closely allied to Telesto :-
$\left\{\begin{array}{l}\text { *flammata, Butl. } \quad \text {. } \\ \text { *ecelipsis, Butl. on. } \\ \text { atromacula, Miskin. } \\ \text { doubledayii, Felder. }\end{array}\right.$
ismene, Nerm. compacta, Butl.
*argenteo-ornatus, Hew.

There is absolutely no doubt that the flammeata of Butler is the female of the species described by him as ecclipsis, though the former has been identified by Miskin as identieal with donnysa, Hew., a quite distinct species belonging to a different though closely allied genus.

## 3. Genus Hesperilla.

Hesperilla, Hewitson, Hundred Hesp. p. 37 (1868).
Type, ornata, Leach.
Antenne: club slender, at an angle with the shaft, usually bent to less than a right angle, tip acuminate. Palpi as in Telesto. Fore wing: inner margin longer than outer margin ; cell less than two-tbirds the length of costa; discocellulars inwardly oblique; vein 5 equidistant from 4 and 6 or slightly nearer to 6 ; veiu 3 shortly before end of cell, about twice as far from 2 as from 4 ; rein 2 considerably mearer to end of cell than to base of wing. Hind wing rather elongate in the male, more rounded in the female; vein 7 well before the end of cell; discocellulars faint; vein 5 not traceable ; reins 2, 3, 4 all close together from end of cell; rein 3 twice as far from 2 as from 4 ; lower margin of cell slightly angled at vein 2, abruptly at vein 3. Hind tibia with two pairs of spurs, upper pair minute.

Male with a linear discal stigma on the fore wing, lying almost at right angles to the imer margiu, extending from just beyond the lower angle of cell as far as but not below vein 1 .

$$
\begin{aligned}
& \text { ornata, Leach.............. } \\
& \text { picta, Leach........... } \\
& 2 .
\end{aligned}
$$

Confined to Australia.
The following Australian species belong to undescribed genera closely allied to Hesperilla : -

> *donnysa, Hew. *halyzia, Hew.

## 4. Genus Patlasingha, not.

## Type, phigalia, Hew.

Antennæ: club rather robust, with a short terminal crook; tip acuminate. Palpi as in Telesto. Fore wing : imner margin longer than outer margin; cell less than two-thirds the length of costa; vein 12 reaching costa before the end of cell ; discocellulars slightly inwardly oblique ; rein 5 practically equidistant from 4 and 6 ; vein 3 shortly before end of cell; vein 2 almost equidistant from base of wing and end of cell. Hind wing evenly rounded; vein 7 well before the end of cell; discocellulars and vein 5 very faint; veins

2,3 , and 4 all close together; vein 3 equidistant from 2 and 4 ; ower margin of cell abruptly bent upwards at vein 13. Hind tibiæ with two pairs of spurs.

No secondary sexual characters on wings of male.


Miskin has sunk maheta as a synonym of iacchus, Fabr., a quite distinct species belonging to a different genus; he has also sunk utea as a synonym of petalia, thongh the two species seem quite distinct ; and he has further sunk scepticalis as a synonym of compacta, Butl., though it would be difficult to imagine two species more dissimilar. This genus is confined to Australia.

## 5. Genus Trapezites.

Trapezites, Hiibn. Verz. p. 112 (1816). Type, symmonus, Hiibn.
Antennæ: club robust, elongate, with a long slender terminal crook. Palpi : second joint densely scaled, third joint minnte. Fore wing: inner and onter margins subequal ; cell less than two-thirds length of costa; vein 12 reaching costa before the end of cell; discocellulars slightly inwardly oblique; rein 5 almost equidistant from 4 and 6 ; vein 3 well before the end of cell; wein 2 more than twice as far from end of cell as from base of wing. Hind wing : outer margin eren ; rein 7 well before end of cell, almost equidistant from 6 and 8 ; discocellulars and rein 5 barely traceable ; veins 2, 3, and 4 all close together, rein 3 almost equidistant from 2 and 4 ; lower margin of hind wing hent upwards at vein 2.

$$
\left\{\begin{array}{l}
\text { symmonus, Hübn. ...... } \\
\begin{array}{l}
\text { incchus, Fabr. } \\
\text { *elicna, Hew. }
\end{array}
\end{array}\right.
$$

Confined to Australia.

## 6. Genus Suastus.

Suastus, Moore, Lep. Ceyl. vol. i. p. 168 (1881).

> Type, gremius, Fabr.

Antennæ: club moderate, elongate, with a short recurved crook; tip acuminate. Palpi erect; third joint long, slender, acmminate, curving backwards, reaching well above the vertex. Fore wing: inner and outer margins subequal; cell less than two-thirds the length of costa; vein 12 reaching costa well before the end of cell; discocellulars subequal, the middle one a little the longer; vein 5 slightly nearer to rein 4 than to vein 6 ; vein 3 well before the end of cell, more than twice as far from 2 as from 4 ; vein 2 considerably nearer to base of wing than to end of cell, in female almost equidistant from end of cell and from base of wing. Hind wing : outer margin evenly rounded; rein 7 shortly before the end of cell discocellulars very faint; rein 5 not traceable; rein 3 shortly before end of cell; vein 2 considerably nearer to end of cell than to base
of wing; lower margin of cell not angled at veins 2 or 3 . Hind tibie with two pairs of spurs.

| gremius, Fabr. <br> diendasa, Moore <br> sala, Hew. <br> aditus, Moore | $\stackrel{\because}{3}$ | $\left\{\begin{array}{l} \text { swerga, do Nioér. ...... } \\ \text { molleri, MJoore. } \\ \text { minuta, MITore ........ } \\ \text { bipunctus, Swinh. ..... } \end{array}\right.$ |
| :---: | :---: | :---: |

The male of gremius has been redescribed by Moore as subyrisea. Confined to Southern Asia.

## 7. Gemis Acleros.

Acleros, Mab. Lep. Mad. i. p. 347 (1887).
Type, leucopyga, Mab.
Closely allied to Suastus, with which it agrees in antemm and palpi; it differs, however, considerably in neuration, vein 2 of the fore wing being nearer to the end of the cell than to the base of the wing. In the hind wing also the cell is longer, and vein 3 is well before the end of the cell instead of immediately before, as in Suustus.

No secondary sexual characters in the male.
Two unidentified species from West Africa.

## 8. Genus Iambrix, nov. (Plate III. fig. 25.)

Type, salsala, Moore.
Antenne rather short; club moderate, gradually thickened, bent at rather more than a right angle; terminal portion short. Palpi: second joint densely clothed ; third joint long, naked, slender, and erect. Wings short and broad ; cell short; middle and lower discocellulars in the same straight line; vein 5 only slightly nearer to 4 than to 6 ; vein 3 very close to end of cell; vein 2 nearer to end of cell than to base of wing. Hind wing: rein 3 from end of cell; vein 7 from before end of cell ; vein 5 wanting; discocellulars barely traceable. Hind tibie with two pairs of spurs.

No secondary sexual characters in male.

$$
\begin{aligned}
& \text { salsala, Moore .......... } 1 . \\
& \text { *stellifer, Butler .......... } \\
& \text { sindu, Felder ............ :3. }
\end{aligned}
$$

Stellifer is quite distinct from salsula, with which it has been said to be synonymous. It is smaller and darker, and is entirely without the golden yellow scales on the upperside which are characteristic of salsala.

It is apparently confiued to Malacca and Burmah, the specimens recorded from various parts of India being an umarked and not uncommon variety of salsala.

Confined to Southern Asia.

## 9. Gemus Koruthaialos, nov. (Plate II. fig. 8.)

Type, hector, Watson.
Antenne moderate, clnb hardly thicker than shaft. Palpi similar
to those of Iambrix, but the third joint is shorter. Shape of wiugs much as in Iambrix, but the costa of fore wiug is more arched; vein 3 well before end of cell; vein 2 about equidistant from end of cell and base of wing; vein 5 about equidistant from 4 and 6 ; upper discocellular minute; vein 11 starting about halfway between base of wing and end of cell, almost exaetly opposite veiu 2, strongly deflected upwards soon after its origin, and touching reiu 12 for a short distance. Hind wing : vein 3 immediately before end of cell; rein 2 about twiee as far from base of wing as from end of cell; vein 7 shortly before end of cell; discocellulars sarely traceable; vein 5 wanting.

Male with a bristly tuft of hairs, springing from the base of the costa of the hind wing ; there being also a distinct groove on the underside of the fore wing helow the subcostal nervure to receive the tuft of hairs when the wings are closed.

This genus is closely allied to Astictopterus, Iambrix, and Sancus, in the last of which vein 11 also touches vein 12 for a short distance; the only other genus in which at all a similar character obtains is Cyclopides, but in this genus veins 11 and 12 altogether anastomose and run confluent for the rest of their coursc.

|  |
| :---: |
|  |  |
|  |  |

And two unnamed species.
Confined to Southern Asia.
Koruthatalos hector, sp. hov.
Astictopterus xanites auctorum, nee Butler.
Above dark fuscous. Fore wing with an oraure-red fascia crossing the wing at the end of the cell, not reaching either the costal or imner margins. Hind wing withont markings. Wings beneath as above; the fascia on the fore wings being broader than above, and extending from close to the costa up to or slightly beyond the first median branch.

The fascia on the fore wing varics considerably in extent, especially on the upperside, but on the underside never reaches the submedian and is never diffused along the inner margin as in xanites.

Expanse 35 millim. (xanites expands 41 millim.).
Oceur's thronghout Burmah and Malacea, and also in Java.
This species has hitherto been confused with xanites, Butler ; but the latter differs considerably ou the underside of the fore wing, the orange fascia extending broadly as far as the outer angle and spreading along the outer half of the inner margin. Xanites appears to be a rare species, the only specimens I have seen being the type from Borneo and a single specimen from Malacea; this is apparently the species figured by Distant ${ }^{1}$ as gemmifer, the gem-like spots of the true gemmifer (which is a Kerana) being omitted both from his figure and description. The species figured by Distant as xanites is the species here described as hector.

[^9]
## 10. Gemus Oxypalpus, nov.

Type, ignita, Mab.
Anteunæ: club moderate, elongate, with a short terminal crook. Palpi widely separated, third joint very long and slender, erect, curving over the vertex ; tip acuminate. Fore wing: costa straight; apex slightly acute; inner and outer margins subequal ; cell less than two-thitds the length of costa; vein 5 only slightly nearer to 4 than to 6 ; vein 3 immediately before end of cell; vein 2 almost equidistant from end of cell and base of wing. Hind wing evenly ronnded ; discocellulars and vein 5 not traceable; vein 7 close to end of cell. In the male vein 3 is given off far beyond the end of cell, there being a glandular thickening of the median just before the origin of vein 3 ; the glandular opening being ou the upperside, where it is partially concealed by a tuft of hairs, attached to the upper margis of cell and directed outwards; vein 2 almost equidistant from base of wing and vein 3 . In the female vein 3 of the hind wing is given out immediately before the end of the cell. Hind tibiæ with two pairs of spurs.

$$
\left\{\begin{array}{l}
\text { ignita, Mab. } \\
\text { gisgon, Mab. }
\end{array}\right.
$$

And two unidentified species.
Confined to the African region.

## 11. Genus Teinorhinus, nov.

Type, watsoni, Holland.
Antennæ : club slender; apical crook short; tip acuniuate. Palpi widely separated ; third joint very long and slender, erect, curving over the vertex. Fore wing short and broad; costa convex ; outer margin convex ; apex rounded; cell less than two-thirds length of costa; vein 12 reaching costa well before the end of cell; vein 2 almost equidistant from rein 3 and base of wing. Hind wing: outer margin even; vein 7 shortly before the end of cell; discocellulars and vein 5 barely traceable; vein 3 immediately before the end of cell; vein 2 almost equidistant from end of cell and base of wing. Hind tibiæ with two pairs of spurs.

No sexual characters on wings of male.

> watsoni, Holland.

Confined to the African region.

## 12. Geuus Osmodes, nov.

Type, laronia, Hew.
Antennæ: club elongate, with a short terminal crook. Palpi: second joint densely clothed, third joint minnte. Fore wing slightly produced apically ; inner and outer margins subequal, inner margin very convex in the male, straight in the female; cell less than twothirds the length of costa; vein 5 slightly wearer to 4 than to 6 ;
rein 3 shortly before the end of cell; vein 2 almost equidistant from vein 3 and base of wing. Hind wing: outer margin even; vein 7 well before the end of cell; discocellulars and vein 5 very faint ; vein 3 shortly before end of cell, about twice as far from 2 as from 4; veiu 2 considerably nearer to end of cell than to base of wing. In the male there is a conspicuous oval glandular patch on the disk of the hind wing on the upperside, and there is also a tuft of hairs on the underside of the fore wing, attached to the basal half of the inner margin.

$$
\begin{aligned}
& \text { luronia, Hew. ............. } \\
& \text { thora, Plötz ............ } \\
& 2 .
\end{aligned}
$$

And two unidentified species.
Confined to Africa.

## 13. Genus Butleria. (Plate III. fig. 21.)

Butleria, Kirby, Syn. Cat. 624 (1871). Type, valdivianus, Phil. Antenne: club rather robnst, arcuate, tip acuminate. Palpi porrect ; second joint long, densely clothed ; third joint slender, naked, obtusely conical. Fore wing; costa arched at base, then straight to apex, having the appearance of being slightly excised; inner margin longer than outer margin; cell less than two-thirds length of costa; vein 12 reaching costa before the end of cell; discocellulars suberect ; vein 6 almost equidistant from 4 and 6 ; vein 3 well before the end of cell; vein 2 slightly nearer to base of wing than to end of cell. Hind wing; outer margin even ; rein 7 well before end of cell; discocellulars and vein 5 faint; vein 3 shortly before end of cell; vein 2 twice as far from base of wing as from end of cell. Hind tibize with two pairs of spurs (except in sotoi and philippii).

| climidiatus, Feld. | cypselus, Feld. ........... 17. |
| :---: | :---: |
| * caicus, Hew. ............ | * ccenides, Hew. ........... 18. |
| jelskyi, Erseh ........... 3. | bissexguttatus, Phil. ... 19. |
| *cryonas, Hew. ........... 4. | \{ valdivianus, Phil. ...... 20. |
| * diraspes, Hew. ........ 5. | carornatus, Feld. |
| *oxaites, Hew. ........... 6. | flavomueulatus, Blanch. . 21. |
| * cuagcs, Herr. ............ 7. | polyspilus, Feld. |
| hespcrioides, Feld. ...... 8. | paniscoidles, Blaneh. |
| *caracatcs, Hew. ......... 9. | *canquencrsis, Reed. |
| *ebnrones, Hew. ............ 10. | *vicina, Reed .............. 23. |
| ibhara, Butl. ............ 11. | *fructicolens, Butl. ..... 2t. |
| agathocles, Feld. ......... 12. | $*^{\text {var. }}$ tractipennis, Butl. |
| *arsincs, Hew. ...... .... 13. | *var. quadrinotatus, Butl. * var pulcher Butl. |
| polycratcs, Feld. .......... 14. | *var. pulcher, Butl. <br> *philippii, Butl. |
| epiphaneus, Feld. ........ 16. | * sotoi, Reed |

The last two species have only terminal spurs on the hind tibio. This is a very large genus, confined to the tropical regions of the New World; it includes forms of which the extremes are very dissimilar in coloration, but which grade one into another imperceptibly.

## 14. Genus Amblyscirtes.

Amblyscirtes, Sc. Syst. Rev. p. 54 (1872). Type, vialis, Edw. S'tomyles, Sc. Syst. Rev. p. 55 (1872). Type, textor, Hïbn. Amblyscirtes, Sc. Butt. New England, vol. ii. p. 1575 (1889).
Antennæ rather short; club moderate, with a short terminal crook. Palpi : sccond joint densely scaled ; third joint erect, short, bluntly conical. Fore wing: costa straight, slightly excised before apex; cell less than two-thirds the length of costa; vein 5 almost equidistaut from 4 and 6 ; vein 3 shortly before end of cell ; vein 2 slightly nearer to base of wing than to end of cell. Hind wing: outer margin even; vein 7 close to end of cell; discocellulars and vein 5 barely traceable; vein 3 from end of cell; vein 2 considerably nearer to end of cell than to base of wing. Hind tibiæ with two pairs of spurs.

| vialis, Edw. ... 1. | comus, Edw. ... 3. |
| :---: | :---: |
| cos, Edw. ...... 2. | textor, Hübn. ... 4. |

I am unable to point out any structural differences betwcen vialis and textor, the types of Amblyscirtes and Stomyles respectively. The generic characters of Stomyles have never been particularized.

Confined to North America.

## 15. Genus Aeromachus.

Aejomuchus, de Nicéville, Journ. Bomb. Nat. Hist. Soc. v. p. 214 (1890).

Type, stigmata, Moore.
Antennæ: club rather robust, with a short terminal crook, tip acuminate. Palpi: second joint pressed close against face ; third joint porrect, short, obtusely conical. Fore wing: inner margin longer than outer margin ; cell less than two-thirds the length of costa ; vein 5 almost equidistant from 4 and 6 . In the male of the type species rein 3 is well before end of cell, vein 2 very close to 3 , lower margin of cell bent upwards at vein 3. In the other species of the genus, vein 3 is immediately before the end of the cell, and vein 2 well before the end, but considerably nearer to it than to base of wing. Hind wing : onter margin even; vein 7 well before the end of cell, both veins at its bifurcation curved outwards in the male of the type species, but meeting at an acute angle in the other species of the genus, vein 7 also arising near the end of cell; discocellulars and vein 5 barely traceable; vein 3 immediately before the end of cell; vein 2 nearer to end of cell than to base of wing. Hind tibie with two pairs of spurs. Male in the type species with a short discal stigma on the upperside of the fore wing, extending from the origin of vein 3 and just below rein 1. There are no secondary sexual characters on the wings of the other species.

$$
\begin{array}{ll|ll}
\text { stigmutu, Moore ........ } & \text { 1. } & \text { jhora, de Nicéville ..... } & 3 . \\
\text { indistineta, Moore ..... } & \text { 2. } & \text { kali, de Nicéville } & . . . . \\
4 .
\end{array}
$$

Confined to Southern Asia.

## 16. Genus Sebastonyma, nov.

Type, dolopia, Hew.
Antennæ: club elongate, with a short apical crook, tip acuminate. Palpi : third joint minute, obtusely conical. Fore wing : imner margin longer than outer margin ; cell less than two-thirds the length of costa; middle discocellular slightly longer than lower one; vein 5 slightly nearer to 4 than to 6 ; vein 3 immediately before end of cell; rein 2 close to end of cell, twice as far from base of wing as from end of cell. Hind wing not at all clongated, nuter margin even ; costa strongly arched at base; vein 7 shortly before end of cell ; discocellulars faint, vein 5 not traceable; vein 3 immediately before end of cell; vein 2 considerably nearer to end of cell than to base of wing; lower margin of cell slightly angled at vein 2. Hind tibie naked and with two pairs of spurs.

Malc with a tuft of hairs affixed at base of the imer margin on underside of fore wing and pointing upwards.
*dolopia, Hew.

Confined to the Indian region.

## 17. Genus Pedestes, nov.

Type, musuriensis, Moore.
Antennæ short; club robust, arcuate with no distinct terminal crook, tip acuminate. Palpi : third joint entirely concealed in the eluthing of the second joint. Fore wing: inner margin longer than outer margin ; cell less than two-thirds the length of costa; vein 12 reaching costa almost opposite end of cell : discocellulars suberect; vein 5 slightly nearer to 4 than to 6 ; rein 3 close to end of cell, rather more than twice as far from 2 as from 4 ; vein 2 nearer to end of cell than to base of wing. Hind wing not clongate; outer margin even, inconspicuously excavated at vein 2; vein 7 shortly before end of cell ; discocellulars and vein 5 very faint ; vein 3 from end of cell; vein 2 more than twice as far from base of wing as from end of cell. Hind tibie with two pairs of spurs. No secondary sexual characters on wings of male.

$$
\begin{array}{lll}
\begin{array}{l}
\text { masuricnsis, Moure } \\
\text { pandita, de Nicéville }
\end{array} . . & 1 . \\
\hline
\end{array}
$$

This genus is confined to the Indian region.

## 18. Genus Arnetta, hov.

Type, atkinsoni, Moore.
Antenuæ : club slender, elongate, with a short terminal crook, tip acuminate. Palpi porrect ; second joint densely scaled ; third joint projecting horizontally in front of the face, short, obtusely conical. Fore wing rather produced apically, less so in female; inner and outer margins subequal ; cell less than two-thirds the length of costa ; vein 12 reaching costa almost opposite the end of cell; discocellulars suberect; vein 5 slightly nearer to 4 than to 6 ; vein 3 close to end
Proc. Zool. Soc.-1893, No. VI.
of cell, about twice as far from 2 as from 4 ; vein 2 almost equidistant from end of cell and from basc of wing. Hind wing evenly rounded; vein 7 shortly before end of cell ; discocellulars and vein 5 very indistinct; vein 3 shortly before end of cell, about twice as far from 2 as from 4 ; vein 2 considerably nearer to eud of cell than to base of wing. Hind tibiæ with two pairs of spurs.

$$
\begin{aligned}
& \text { atkinsoni, Moore ...... } 1 . \\
& \text { *subtestaceus, Moore ... } 2 . \\
& \{\text { vinतliana, Moore ...... } 3 . \\
& \{\text { nilyiriana, Moore ...... } 4 .
\end{aligned}
$$

In the males of athinsoni and subtestaceus there is attached along the basal half of the inner margin of the fore wing a tuft of longish hairs which are turned up and spread out fanwise over the underside of the hind wing.
"Isoteinon" khasianus, Moore, modesta, Moore, and microstictum, W.-M. and de Nicév., also probably belong to this genus, but there are no specimens available for examination.

Confined to the Oriental region.

## 19. Genus Hyarotis.

Hyarotis, Moorc, Lep. Ceyl. vol. i. p. 174 (1881).
Type, adrastus, Cramer.
Antemæ long; club moderate, elongate, with a short recurved crook, tip acuminate. Palpi erect ; third joint obtusely conical, short, almost entirely concealed in the clothing of the second joint. Fore wing : inner and outer margins subequal ; cell less than two-thirds the length of costa; vein 12 reaching costa before the end of cell; discocellulars inwardly oblique, the middle one the longer; vein 5 nearer to 4 than to 6 ; vein 3 very close to end of cell; vein 2 slightly nearer to base of wing than to end of cell. Hind wing rather elongate in male, more rounded in female, outer margin even; vein 7 well before the end of cell, only slightly nearer to 6 than to 8 ; discocellulars faint, outwardly concave; vein 5 not traceable; vein 3 immediately before end of cell; vcin 2 considerably nearer to end of cell than to base of wing. Hind tibie with two pairs of spurs.

Allied to Isoteinon.
Confined to Southerı Asia.

## 20. Genus Hypoleucis.

Hypoleucis, Mab. C. R. Soc. Ent. Belg. vol. xxxv. p. 1xix (1891). Type, tripunctata, Mab.
Antennæ : club slender, with a short terminal crook. Palpi : second joint densely scaled; third joint minute, obtusely conical. Fore wing : imer and outer margins, subequal; cell less than two-thirds the length of costa ; vein 5 slightly nearer to 4 than to 6 ; vein 3 immediately befure end of cell; vein "2 almost equidistant from end
of cell and base of wing, slightly uearer to base of wing. Hind wing: outer margin even; vein 7 shortly before end of cell; vein 3 from end of cell; vein 2 more than twice as far from base of wing as from end of cell. Hind tibiæ with two pairs of spurs.

> *ophiusa, Hew.

The above diagnosis is takeu from ophiusa, Hew., which Mabille includes in his genus Hypoleucis.

Confined to Africa.

## 21. Genus Isoteinon.

Isoteinon, Felder, Wien. ent. Monat. vi. p. 30 (1862).
Type, lamprospilus, Felder.
Antemıe: club moderate, elongated, terminal crook short, tip acuminate. Palpi : sceond joint densely clothed with short scales; thirerd joint erect, reaching well above the vertex of the head, slender, obtusely conical. Fore wing: inner margin considerably longer than outer margin; cell less than two-thirds the length of costa; discocellulars erect; vein 5 slightly nearer to 4 than to 6 ; veiu 3 close to end of cell ; vein 2 about equidistant from end of cell and base of wing in the male, considerably nearer to base of wing in the female. Hind wing narrow ; vein 7 shortly before end of cell; discocellulars and vein 5 faint, but distiuctly traceable; vein 3 immediately before end of cell. Hind tibiæ sparsely clothed with hairs and with two pairs of spurs. No secondary sexual characters on the wings.

$$
\left\{\begin{array}{l}
\text { lemprospilus, Feld. } \\
\text { vitrce, Murray. }
\end{array}\right.
$$

Many Indian species have been put into this genns ; none of those, however, which I have been able to examine belong to it, the direction of the third joint of the palpi alone readily distinguishing them. This genus appears to be allied to Hyarotis, Moore.

Habitat. China and Japan.

## 22. Genus Isma.

Isma, Distant, Rhop. Malay. p. 386 (1886). Type, obscura, Dist.
Antenne: club slender, elongate, with a short terminal crook, tip acuminate. Palpi porrect; third joint slender, almost concealed, bluntly conical. Fore wing: inner margin louger than outer margin ; cell less than two-thirds the length of costa; veiu 12 reaching costa well before the end of cell; discocellulars suberect; vein 5 slightly nearer to 4 than to 6 ; vein 3 shortly before end of cell; vein 2 almost equidistant from vein 3 and base of wing. Hind wing : not at all elongated, outer margin even, inconspicuously excised as vein 2; vein 7 immediately before end of cell, very remote from base of wing ; discocellnlars faint, strongly outwardly oblique; vein 5 not traceable; vein 3 close to end of cell; vein 2 more than twice as far from base of wing as from end of cell; lower
margin of cell not angulated at wein 2 or 3. Hind tibie naked and with two pairs of spurs. No sexual characters on wings.

> * cephala, Hew. ................... 1.
> * bononia, Hew. ................
> $\vdots$.
"Hesperia!" cephaloides, de Nicéville, also probably belougs to this genus.

There is no doubt that cephatu and bononia are congeneric, and Distant puts the latter into his genus Isma, thougli, judging from the plate, the type species obscura appears to differ from bononia considerably.

Confined to Burma and Malaysia.

## 23. Genus Lophoides, nor.

T'ỵe, iupis, de Nicéville.
Antenuse long; club slender, elongated, with a short terminal crook. Fore wing produced at apex, inuer margin slightly longer than outer margin; cell less than two-thirds length of costa ; rein 12 reaching costa well before the end of cell ; discocellulars suberect ; rein 5 slightly uearer to 4 than to 6 ; vein 3 shortly before the end of cell; rein 2 from close to base of wing (in the female rein 2 will probably be found to be further removed from the base). Hind wing : outer margin evenly rounded; vein 7 well before the end of cell ; discocellulars faint; vein 5 not traceable; rein 3 shortly before end of cell ; vein 2 nearer to end of cell than to base of wing. Hind tibice naked and with two pairs of spurs.

Male with an oval glaudular patch at extreme base of fore wing, more conspicuous on the underside, with a tuft of longish hairs, directed upwards, atfixed to the inner margin of the fore wing on the underside, with a similar tuft of laxly set hairs on the upperside of the hind wing near the base of the costal margin, and with a fringe of long hairs at the anal ingle of hind wing.
iapis, de $\lambda$.
Habitat. Burma.

## 24. Gemis Zographetus, not.

Type, satwa, de Nicéville.
Antenuæ: club elongate, with a short apical crook, tip acuminate. Palpi : third joint minute, obtusely conical. Fore wing : apically rather produced; inner margin longer than outer margin; cell less than two-thirds the length of costa; vein 12 reaching costa before the end of cell ; discoceliulars suberect, the middle one slightly louger than the lower ; vein 5 slightly nearer to 4 than to 6 ; vein 3 shortly before end of cell; vein 2 very close to base of wilig (in the female vein 2 is about equidistant from base of wing and vein 3). Hind wing: outer margin slightly excavated at vein 2 ; rein 7 well before the end of cell, arising at an acute angle; vein 3 immediately before end of cell; rein 2 very close to vein 3 , more than twice as far from base of wiug as from end of cell: lower
margin of cell slightly angled at vein 2. Hind tibix with two pairs of spurs.

Male with two pairs of linear glandular streaks on the upperside of the fore wing, the upper pair on either side of rein 2 at its bifurcation, the lower tro immediately beneath these on either side of vein I. These glandular streaks are most developed in satwa, and least in ogygia.

$$
\begin{aligned}
& \text { satura, de Nicérille ............... } 1 . \\
& \text { favipennis, de Nicérille ......... } 2 . \\
& \text { *ogygia, Heritson ................. } 3 .
\end{aligned}
$$

Confined to Southern Asia.
25. Genus Matapa.

Matupu, Moore, Lep. Ceyl. vol. i. p. 163 (1881).
Type, aria, Moore.
Antennæ: club robust, clongate, terminal crook moderatc. Palpi: second joint rery densely scaled, third joint entirely concealed. Fore wing: rather produced at apex, inner and outer margins subequal; cell less than two-thirds len th of costa; discocellulars strongly inwardly oblique; vein 5 only slightly nearer to 4 than to 6 ; vein 3 well before the end of cell, slightly nearer to 4 than to 2 ; rein 2 slightly nearer to base of wing than to end of cell: lower margin of cell angled at vein 3. Hind wing: outer margin even, slightly excised between reins 3 and 16 ; vein 7 well before the end of cell ; discocellulars faint; rein 5 obsolete; rein 3 from end of cell; rein 2 more than trice as far from base of wing as from end of cell. Hind tibix fringed and with two pairs of spurs.

Male with an oblique linear glandular streak on the upperside of the fore wing, extending from veiu 3 as far as vein 1.

| aria, Moore sasivarna, M <br> shalgrama, |
| :---: |
|  |  |
|  |  |

Confined to Southern Asia.

## 26. Genus Paduka.

Pardul:c, Distant, Rhop. Mal. n. 375 (1886).
Type, lebudea, Herwitson (=glandulosa, Dist.).
Antennæ and palpi much as in Erionote. Fore wing: cell less than two-thirds length of costa; inner margin longer than outer margin ; vein 12 terminating before end of cell ; vein 7 before end of cell ; upper discocellular short but distinct, almost parallel mith the costa; middle and lower discocellulars almost erect in the same straight line, the middle the longer; vein 3 four times as far from base of wing as from end of cell, and more than twice as far from 2 as from 4 ; rein 2 almnst equidistant from 3, and base of wing ather nearer the latter. Hind wing: outer margin sinuated; ein 7 almost equidjstant from 8 and 6 ; discocellulars outwardly
oblique; radial wanting; median bent upwards at vein 2; rein 3 equidistant from 2 and 4 ; vein 2 close to end of cell, very remote from base of wing. Hind tibix with two pairs of spurs, the upper pair minute.

The above description is from a female of the trpe species. In the male vein 3 of the fore wing is further from the end of the cell, and there are the following secondary sexual characters :-a discal patch of silky hairs on the upperside of fore wing, a long tuft of hairs on underside of fore wing at base of submedian, and two glandular streaks situated on reins 2 and 3 of the hind wing.

Closely allied to Gangaru.

$$
\left\{\begin{array}{l}
\text { *lcbadec, Hew. } \\
\text { glandulose, Dist. } \\
\text { sulfascieta. Mrore. }
\end{array}\right.
$$

Confined to Sonthern Asia.

## 27. Genus Erionota.

Erionota, Mab. Amm. Soc. Ent. Belg. vol. xxi. p. 34 (1878).
Type, thrax, Linn.
Antenne not hooked; club moderate, gradually thickened, terminal portion bent at more than a right angle, and gradually tapering to a point. Palpi: second joint pressed close against the face, densely scaled; the third joint entirely concealed. Fore wing: inner and outer margins subequal; celi considerably less than two-thirds length of costa; vein 12 reaching costa before the end of cell; upper angle of cell acute; upper discocellnlar mimute, middle and lower discocellulars slightly oblique, the middle one the longer ; rem 5 nearer to 4 than to 6 ; vein 3 hardly twice as far from 2 as from 4 ; vein 2 almost equidistant from vein 3 and hase of wing. Hind wing : outer margin sinuate, slightly lobed towards anal angle ; rein 7 nearly equidistant from 6 and 8 ; middle discocellular erect, lower strongly outwardly oblique; vein 5 wauting; rein 3 just before end of cell; vein 2 more than trice as far from base of wing as from end of cell. Hind tibire fringed, but not densely, and with two pairs of spurs.

Closely allied to Gangara.

> thrax, Linn. ........................... 1. $\left\{\begin{array}{l}\text { acrolcuca, Wood-Mason, de Nicérille. } \\ \text { hiraco, Moore. } \\ \text { lara, Swinhoe. }\end{array}\right.$

## 28. Genus Gangara. <br> Giangura, Moore, Lep. (ieyl. rol. i. p. IGt (1881).

Type, Ihyrsis, Fabr.
Antemme and palpi as in Erionotr. Fore wing: imner margin longer than outer margin ; cell not much more than half the length of costa; rein 12 terminating before the end of cell: outer end of cell oval ; upper discocellular sery short, middle and lower discocellnlars almost erect and in the same straight line, the
middle one the longer; vein 3 more than twice as far from 2 as from 4 ; vein 2 considerably nearer to base of wing than to vein 3 , and about twice as far from end of cell as from base of wing. Hind wing: outer margin sinuate; middle discocellular very faint, almost erect, lower well developed, outwardly oblique; wein 5 wanting ; vein 7 consilerably nearer to 6 than to 8 ; vein 3 just before end of cell; rein 2 nearer to base of wing than to rein 3 . Hind tibix slightly fringed and with two pairs of spurs.

In the male there is on the fore wing a linear glandular streak lying above the central portion of vein 1, and a second double streak lying on both sides of the basal half of vein 2: on the hind wing the basal half of veins 2 and 3 and the portion of the lower margin of the cell lying between them are much swollen. Ou the underside of the fore wing also there is a patch of erect hairs extending. from vein 1 to the inner margin, and the hind wing above is thickly clothed from its base with long hairs which conceal the swollen veins. Abdomen conspicnously tufted above.

```
\{thyrsis, Fabr. ...................... 1. \{pandia, Moore.
```

Confined to Southern Asia.

## 29. Genus Sancus. (Plate II. fig. 9.)

Sancus, de Nicéville, Journ. Nat. Hist. Soc. Bombay, vol. vi. no. 3, p. 395 (1891). Type, subfusciatus, Moore.
? Psolos, Mabille, MS. ? Type, mulligo, Mabille.
Antennæ : club elongate, tip acuminate, recurved. Palpi: second joint densely scaled, third joint almost concealed. Palpi and antennæ as in Kerana. Fore wing much elongated. "Male with a curious impressed elongated oral brand placed so immediately behind as to touch the median nerrure." Vein 11 of the fore wing strongly deflected upwards soon after its origin and tonching the costal nerrure for a short distance; vein 5 nearer to 4 than to 6 ; middle discocellular longer than lower one.

Allied to Kerana, Astictopterus, Iambrix, and Horuthaialos. From the three former it may be distinguished by the confluence of veins 11 and 12, and from the latter by the differently formed palpi.
$\left\{\begin{array}{l}\text { mulligo, Mabille ................. } 1 . \\ \text { subfasciatus, Moore. } \\ \left\{\begin{array}{l}\text { utunda, Plötz. } \\ \text { fuscula, Suellen .................. } \\ \text { celunda, Stand. }\end{array}\right.\end{array}\right.$

There has been some doubt about the correct synonymy of the species of this genus, chiefly owing to Heer Suellen having stated that the characteristic "male mark" of the genus is wanting in fuscula. The courtesy of the Hon. Walter Rothschild has, however, enabled me to examine four males and one female of undoubted fuscula, collected in S.W. Celebes by Mr. Doherty, and I find that the males have the "male mark" as in pullign, thongh it is much
less conspicuous, being hardly visible on the upperside, but appearing below as a pale oral streak. This incouspichous mature of the male mark in fuscula would doubtless account for its being overlooker by Heer Suellen, especially if the specimens he examined were at all worn. This species can be separated from pulligo by having the underside of the hind wing entirely unmarked, and by the beantiful plum-like bloom of the upperside. This last character is only apparent in fresh specimens, those in the Hewitson collection in the British Mnseum having faded to a doll brown. Fusculu seems to be confined to Celebes, while pulligo ranges from Assam throughout Burma, Malacca, Java, Borneo, Suln, and Palawan, and also occurs in Sonthern India.

## 30. Genus Eumesia.

## Eumesia, Felder, Reise Novara, p. 504 (1867). <br> Type, semiargentea, Feld.

Autennæ short, less than half the length of costa; club stont, arcuate, tip acuminate. Palpi porrect ; third joint very slender, hluntly pointed. Fore wing: inner margin considerably longer than onter margin; cell less than tro-thirds the length of costa; rein 12 reaching costa almost opposite the end of cell; vein : slightly nearer to 4 than to 6 ; rein 3 well before end of cell, much curved in its course; rein 3 slightly nearer to base of wing than to end of cell. Hind wing: outer margin evenly rounded; vein 7 shortly before end of cell; discocellulars and rein 5 barely traceable : vein 3 immediately before end of cell; rein 3 nearer to end of cell than to base of wing. No epiphysis on fore tibir. Hind tibiæ with terminal pair of spurs only, but beset with numerous short spines on the lower surface.

> scmiargentea, Feld.

Confined to tropical Sonth America.

## 31. Genus Argolpteron, not.

Type, aureipennis, Blanch.
Antemæe more than half the length of costa; club moderate, straight, elonvate, tip blunt. Palpi porrect ; second and third joints slender, clothed to the tip, with laxly set scales. Fore wing: costia very straight, iuner margin considerably longer than outer margin : cell less than two-thirds the length of costa; vein 12 reachiug costa before the end of cell; upper discocellular slightly longer than lower; vein 5 slightly nearer to 4 than to 6 ; rein 3 shortly before the end of cell; vein 2 more than twice as far from end of cell as from base of wing. Hind wing: outer margin rounded; rein 7 close to end of cell; vein 5 well developed, slightly nearer to 6 than to 4 ; vein 3 close to end of cell; rein 2 slightly nearer to base of wing than to end of cell. Fore tibire rery long, without epiphysis. Find tibix with only terminal pair of spurs. Abdomen reaching. well beyond the anal angle of the hiud wings.

Mabille has recently redescribed what is accepted as the female of aureipennis under the name Steropes tripunctatus.

Confined to South America.

## 32. Genus Heteropterus.

Heterapterus, Dim. Zool. Anal. p. 271 (1806).
Type, morpheus, Pall.
Antemie sliort, less than balf the length of costa ; club moderate, straight, elongated, blunt. Palpi porrect, densely clothed with laxly set scales, almost concealing the third joint, which is short, slender, and bluntly conical. Fore wing: inner margin longer than outer margin ; cell less than two-thirds the length of costa; vein 12 reaching costa before the end of cell ; upper discocellnlar slinrt but distinct; middle discocellular longer than lower ; rein 5 slightly nearer to 4 than to 6 ; vein 3 shortly before end of cell; rein 2 more than twice as far from end of cell as from base of wing. Ilind wing : outer margin even ; rein 7 well before end of cell; discocellulars and vein 5 barely traceable; vein 3 well before end of cell, more than twice as far from 2 as from 4 ; rein 2 nearer to base of wing than to end of cell. No epiphysis on fore tibie. Hind tibiæ almost naked: in morpheus with tiro pairs of spurs, in ornatus only with terminal pair. Abdomen reaching beyond the anal angle of hind wings.

$$
\begin{aligned}
& \text { (morpheus, Pall. } \\
& \text { speculum. Rott. } \\
& \text { \{steropes, Wien. Verz. } \\
& \text { laracinthus, Fabr. } \\
& \text { speculifer, Fourer. } \\
& \text { ornatus, Brem. } \\
& 1 . \\
& \text { ornatus, Brev. }
\end{aligned}
$$

Morpheus is a European and ornatus a Japanese species.

## 33. Genus Pamphila.

Pamphila, Fabr. Ill. Mag. vi. p. 287 (1807).
Type, palcemon, Pall.
Steropes, Boist. Voy. Astrol. ]. 167 (1832). Nom, præoc.
C'arterocephalus, Lsed. Verh, zool. - bot. Gesellsch. Wien, ii. pp. 26, 49.

Type, pulremon, Pall.
Antenne short, not half the length of costa; cluh stout, elongate, biunt. Palpi porrect, densely clothed with laxly set scales almost concealing the third joint, which is short, slender, and bluntly conical. Fore wing : inner margin considerably longer than outer margin; cell less than two-thirds the length of costa; vein 12 reaching costa before the end of cell; upper discocellular short but distinct, outwardly oblique ; mirldle discocellular slightly longer than lower; vein 5 slightly nearer to 4 than to 6 ; vein 3 very close to end of cell; vein 2 almost equidistant from base of wing and end of cell. Hind wing : onter margin even; cell very long, reaching more than half across ming; rein 7 shortly before end of cell ; discocellulars and vein 5 barely traceable; vein 3 immediately before end of cell ; vain 2 considerablv nearer to end of cell than to
base of wing. No epiphysis on fore tibir. Hind tibiæ slightly fringed and with only terminal pair of spurs.

| (palemon, Pall. ......... 1. | mesapano, Sc. ........ 3. |
| :---: | :---: |
| $\left\{\begin{array}{l}\text { paniscus, Fabr. }\end{array}\right.$ | \{ syluius, Knoeh ........ 4. |
| brontes, Wien. Verz. | \{syluieola, Meig. |
| mandan, Edw. ........ 2. | argyrostigma, Erersm. 5 . |

Some 600 or 700 species have been described in this genus, though the ahove five probably represent all the species which eorrectly belong to it. The remainder include species belonging to almost every described genus.

Distribution. Holarctic.

## 34. Genus Cyclopides. (Plates II. fig, 10 ; III. fig. 14.)

Cyclopides, Hiibn. Verz. p. 111 (1816). Type, metis, Lim.
Antemme short, less than half the length of costa; clab blunt, oval, without terminal crook. Palpi porrect; second joint thickly clothed with lax scales, almost concealing the third joint, which is slender and obtusely conical. Fore wing short and broad, outer margin convex, considerably shorter than inner margin; cell less than two-thirds the length of costa; vein 12 reaching costa well before the end of cell; vein 11 very short, rumning at once into 12 ; discocellulars suberect; vein 5 almost equidistant from 4 and 6 , slightly nearer to 4 ; vein 3 close to end of cell; vein 2 equidistant. from base of wing and vein 3. Hind wing evenly rounded; discocellulars and vein 5 hardly traceable; vein 2 nearer to 3 than to base of wing. No epiphysis on fore tibie. Hind tibie with two pairs of spurs, except in willemi, in which the upper pair are wanting; both pairs are distinct in the other five species here quoted exeept in meninx, in which the upper pair are minute.


And one umamed species.
Confined to Africa.

## Synopsis of Genera of Pamphiline.

## Section B.

a. Tip of antenme blunt.
$a^{1}$. Club of antenne forming a hollowed disk.
Taractrorfera, Butler. Type, macius, Fabr. (1)
13. Olub of antenure elougate.
$\pi^{2}$. Third joint of palpi horizontal.
$a^{3}$. Apex of fore wing not prodnced.
Ampitita, Moore. Type, maro, Enbr. (2)
$l^{3}$. Apex of fore wing produced.
Kenestrs, g. 11. Type, lepenula, Wallgr. (3)
$\gamma^{2}$. Third joint of palpi erect.
$a^{3}$. Fore wing rery elongate.
Apaustts, Hhm. Type, menes, Cram. (4)

## $b^{3}$. Fore wing not elongate.

$a^{1}$. Fore wing: costa evenly arched, making the wing appear
broader. Averloxtrin, Feld. Type, numita, Fabr. (5)
$b^{4}$. Fore wing, eosta slighty cone:ive.
$a^{5}$. Vein 2 of fore wing nearer to end of cell than to base of
wing. Corsodns, Speyer. Type, procris, Felder. (6)
$b^{5}$. Vein 2 of fore wing nearer to base of wing than to end of
eell.
Adopras, Billb. Type, thaumas, Hufin. ( 7 )
b. Tip of antennæ acuminate.
$a^{2}$. Terminal crook of antenne minute, never as long as the width of the olub.
$a^{2}$. Antenne about twiee as long as the breadth of thorax, but less
than half as long as the costa.
$a^{3}$. Vein 3 of foro wing immediately before the end of cell.
$a^{!}$. Discal stigma on fore wing of male continuous, followed beneath hy an inconspicuous field of erect seales.

Erynus, Sehrank. Type, comma, Limn. (8)
Anthomaster, Se. Type, lemardus, Hair. (9)
$l^{+}$. Discal stigma on fore wing of male bordered on either side by a streak of speeialized seales. but with mo fiek of ereet scales beneath. Ochlobes, Sc. Type, nemorum, Boiscl. (10)
$c^{\dagger}$. Diseal stigma of male diseontinuous, followed beneath by a moro or less conspicuous field of specialized scales. Hind tarsi longer than middle tarsi.

Thymancus, Hbu. Type, vibex, Hbu. (11)
d. Discal stigma of male discoutinnous, followed beneath by a very conspicuous field of specialized scales. Hind tarsi not longer than middle tarsi.

Atalopenes, Sc. Type, huron, Edw. (12)
$1 i^{3}$. Voin 3 of fore wing well before the end of cell.
Polites, Sc. Type, peckius, Kirby. (13)
$h h^{2}$. Antemme very short, hardly longer than the breadth of the thorax.
$a^{3}$. Vein 2 of fore wing nearer to hase of wing than to end of cell.
Hylerima., Billb. Type, pheylaus, Drurs. (14)
$1 i^{3}$. Vein 2 of fore wing nearer to end of cell than to base of wing.
Geaeres, Hbn. Type, pygmaus, Hbn. (1!))
$h^{2}$. Temuinal orook of anteunæ short, ats long as or slightly longer than the width of the club.
$a^{2}$. Club of antenne short and stour.
$u^{3}$. Vein 2 of fore wing harcly nearer to end of cell thim to base of wing. Calrodes, Hon. Type, eflliuts, Crain. (20)
$b^{3}$. Vein 2 of fore wing considerably nearer to end of cell than to
base of wing. Parmala, Moore. Type, guttatus, Brem. (21)
7i. Club of antenme comparatively elongate.
$u^{3}$. Fore wing : outer margin hardly, if at all, longer than immer margin.
$\|^{1}$. Antenne of moderate length.
$\pi^{5}$. Vein 11 of fore wing not approximating to 12 .
$a^{4}$. Vein 3 of hind wing from before end of cell.
$\pi^{\top}$. Vein 2 of fore wing in the male nenrer to end of cell than to base of wing.
$r^{4}$. Male, vein 3 of fore wing immediately before end of cell.
$a^{\prime \prime}$. No diseal stigma in male.
$a^{10}$. Vein 3 of fore wing hardly twice as far from 2 as from 4 .

Bams, Moore. Type, ockia, Hew. (22)
$h^{10}$. Vein 3 of fore wing many times further from 2 than from 4.
$a^{11}$. Outer margin of fore wing longer than inner margin.

Lerodea, Sc. Type, eufala, Smith-Abb. (23)
$l^{11}$. Tnner margin of fore wing longer than outer margin.

Padriana, Moore. Type, mesa, Moore. (15)
$l^{3}$. Male with a diseal stigma on fore wing.
Phenbones, Hbn. Type, pertinax, Cram. (30)
28. Male, vein 3 of fore wing well before the end of cell.
$a^{3}$. Male with a diseal stigma on fore wing.
Telicots, Moore. Type, angius, Limn. (16)
$l^{9}$. No diseal stigma on fore wing of male.
Onryz., g. n. Type, meikila, de N. (35)
$h h^{7}$. Vein 2 of fore wing in both sexes nearer to base of wing than to end of cell.
$a^{4}$. Male with a circular glanchular patch on hind wing at origin of vein $\%$.

Curimin, Moore. I'spe, tympanifera, Moore. (34)
$b^{*}$. Male with a linear diseal stigma on mpperside of fore wing.
$u^{9}$. Tind and middle tibise conspicuously spined.
Limocioress, Se. Type, manatarqua, Se. (24)
i". Mind and middle tibix not spined.
"10. Vein 3 of hind wing shortly before end of cell, almost twice as far from 2 as from 4.

Eorines, S'c. Type, metacomet, Harris. (25)
$1,{ }^{10}$. Vein 3 of hind wing immediately before end of rell, many times further from 2 than from 4.

Augi.ines, Hbn. Type, syluanus, Esp. (17)
$c^{4}$. Male with two glandular streaks and a tuft of hair on underside of fore wing.

Gehensa, g. n. Type, abima, Нent. (27)
$d^{9}$. No secondary sexual characters on the wings.
$u^{9}$. Club of antemna apart from terminal crook straight.
a $^{10}$. Vein 7 of hind wing less than trice as far from 8 as from 6.
$u^{11}$. Vein 2 of hind wing less than twice as far from base of wing as from end of cell.

Phemiades, ILbn. Type, phineus, Cram. (18)
$1,{ }^{11}$. Vein 2 of hind wing more than twiee as far from base of wing as from end of cell.

Oligoria, Sc. Type, maculata, Edw. (26)
${ }^{10}$. Yein 7 of hind wing more than twice as far
from 8 as from 6 .
$4^{11}$. Vein 2 of hind wing twice as far from base of wing as from end of cell.

Actinon, g. n. Type, radians, Moore. (28)
$b^{11}$. Vein 2 of lind wing not twiee as far from base of wing as from end of cell.
$4^{12}$. Hind wing produced in the median area, the distanee from base of wing to extremity of vein 4 considerably greater than the distance from extremity of vein 8 to extremity of rein 1 a.

Udasres, Moore. Type, folles, Cram. (37)
$6^{12}$. Hind wing not produced in the median area, the distance from base of wing to extremity of vein 4 less than the distance from extremity of rein 8 to extremity of vein $1 / a$
Notocrypta, de N. Type, curvifascia, Feld. (36)
$b^{3}$. Olub of antenus apart from terminal erook arcuate.

Poaves, Sc. Type, massasoit, Sc. (31)
$b^{6}$. Vein 3 of hind wing from end of cell.
$a^{7}$. Fore wing short and broad, not apically produced. Purcainss.ı, Sc. Type, viator, Edw. (32)
$b^{7}$. Fore wing produced apicilly.
$a^{y}$. Vein 3 of fore wing nearer eud of cell than baso
of ring. Halpe, Moore. Type, beturia, Hew. (29)
$b^{3}$. Vein 3 of fore wing nearer base of wing than end of cell. Atmyone, Sc. Type, iova, Sc. (33)
$b^{5}$. Vein 11 of fore wing rumning very close to $1:$.
$a^{6}$. Palpi conspicuous.
B.aracus, Moore. Type, vittahus, Feld. (38)
$b^{3}$. Palpi inconspicuous.
Astictupterus, Feld. Type, jaina, Feld. (39)
$h^{2}$. Antenna exceptionally loug.
$a^{5}$. Vein 3 of hind wing well before end of cell.
Kerans, Dist. Typo, armatus, Druce. (10)
$b^{5}$. Veiu 3 of hind wing immediately before end of cell.
$a^{6}$. Hind tibie thickly set with short spines and with only terminal pair of spurs.

Katneus, g. 11. Type, johnstonii, Butler. (41)
$b^{3}$. Ilind tibix not spined and with two pairs of spurs.
$a^{7}$. Vein 2 of fore wing nearer to base of wing than to end of cell.
$u^{*}$. Vein 2 of hind wing alnost cquidistant from end of cell and base of wing.

Ancistruides, Butl. Type, longicomis, Butl. (42)
$b^{2}$. Vein 2 of hiud wing more than twice as far from base of wing as from cud of cell.

Prdanis, Dist. Type, hyche, Hem. (43)
$b^{7}$. Vein $\stackrel{?}{?}$ of tore wing nearer to end of cell than to base of wing.
$a^{y}$. Vein 11 of fore wing rumning very clone to 12.
Pardheodes, Butl. Type, ectipus, Cialu. (4t)
1,. Vein 11 of fure wing not approximating to 12.
Ceraticula, Butl. Type, nothus, Fabr. (45)
$b^{3}$. Fore wing, outer margiu considerably longer than imer margin.
$a^{1}$. No secondary sexual characters on fore wing of male.
Plistingis, Butl. Type, flatescens, Feld. (46)
$b^{4}$. Male with a linear discal stigma on fore wing.
Leres., Sc. Type, accius, Smith-Abb. (1i)
$c^{\prime}$. Terminal crook of antennax long, about twice as long as the breadth of the club.
$a^{2}$. Male with a tuft of hairs at base of fore cosa.
P'itilunia, Moore. Type, murdava, Moore. (48)
$b^{2}$. No tuft of hair on fore cose of male.
$a^{3}$. Hind wing conspicuously elongatod, anal angle pointed.
Niconiades, Hbn. Type, r'enthaphes, Hbn. (49)
$b^{3}$. Hind wing only slightly elongate, anal angle rounded.
$a^{4}$. Vein 3 of fore wing immediately before end of cell, more than
three times as far from 2 as from 4 .
$a^{5}$. No discal stigma on fore wing of male.
$a^{6}$. Fore wing not apically produced, apex not truncate.
$a^{7}$. Oosta of fore wing evenly arched from base to apex.
Cobalus, Hbu. Type, virbius, Oram. (50)
$b^{7}$. Costa arched at base, then straight to aper.
Licunucuus, Hbu. Type, olcnus, Hbn. (51)
$b^{6}$. Fore wing apically produced, apes truncate.
Oarystes, Hbin. Type, jolus, Cram. (.)
$u^{6}$. Fore wing apicilly produced, apex not truncate.
Lotongus, Dist. Type, calathus, Hew. (53)
$b^{j}$. Male with a discal stigma on fore wing.
$a^{6}$. Fore wing apically produced, apex slightly truncate;
discal stigma of male faint.
Thracines, Hbil. Type, phidon, Cram. (5t)
$h^{6}$. Fore wing not produced apically, outer margin evenly
couvex ; discal stigma of male conspicuous.
Tabines, Hbur. Type, sciyestus, Cram. (55)
b) Vein 3 of fore wing well before eud of cell, less than twice as
far from ${ }^{2}$ as from 4.
$a^{\text {i }}$. Male with a diseal stigma on fore wing.
Pericianias, Sc. Type, corydon, Fabr. (5í)
1, No discal stigma on fore wing of male.
$a^{6}$. Tein 5 of hind wing wanting.
$a^{i}$. Tein 2 of fore wing almost equidistant from cnd of cell
aud base of wing.
Unkan., Dist. Type, batara, Dist. (5i)
$b^{\top}$. Vein 2 of fore wing almost equidistant from rein 3 and
basc of ming. Hidari, Dist. Type, irava, Moore. (58)
$b^{b}$. Yein $\bar{j}$ of hind wing well developed.
Pteroteinon, g. it. Type, lanfella, Hew. ( 59 )

## 1. Gemus Taractrocera. (Plate III. fig. 20.)

I'aractiocera, Butler, Cat. Lep. Fabrr. p. 279 (1869). Type, mavius, l’abr.
Antennæ short; club forming a flattened disk, conspicuously hollowed out, tip blunt. Palpi : second joint densely scaled; third joint long, slender, erect, reaching above the vertex, tip acuminate. Fore wing: inner margin longer than onter margin; cell less than two-thirds the length of costa; vein 12 reaching costa well before the end of cell; middle discocellular considerably longer than lower one; rein 5 close to bottom of cell; vein 3 well before end of cell, about twice as far from 2 as from 4 ; rein 2 slightly nearer to end of cell than to base of wing. Hind wing: outer margin even; vein 7 rery close to end of cell ; discocellulars faint; vein 5 not traceable; vein 3 immediately before end of cell; vein 2 twice as far from base of wings as from end of cell. Hind tibiæ with two pairs of spurs.

The only species of those mentioned below in which there is a stigma in the male is papyria, Boisd, in which there is an exceptionally long, slightly oblique stigma ou the fore wing, extending from veiu 5 as far as vein 1 , meeting the latter considerably nearer the margin than the base of wing.

| maevius, Fabr. .............. 1. | flarovittata, Latr. |
| :---: | :---: |
| flaceus, Fabr. | papyria, Boisd. |
| sagera, Moore. | nitrolimbates, Snell. |
| cetreno, Cox ................. | *niceuillci, sp. n. |
| *ardonia, Hew. .............. \%. | *ceramus, Hew, |
| *lama, Moore |  |

And seren unidentified species. The "Pumphila" avonti of de Nicéville also probably belongs to this genus.

This is a genus of very numerous species, which ranges from India through the Malay Archipelago to Australia, appearing to reach
its greatest development in the islauds of the Archipelago; the peculiar form of the antennal club readily distinguishes it.

Taractrocera nicevillei, sp, nor.
Above dark brown, spotted with yellow. Fore wing with a lunate spot at end of cell; a subapical spot divided into three by veins, a spot below this and close to the outer margin divided into two, and a triple spot extending from the upper inedian branch to as far as the submedian parallel to the outer margin, but further removed from it than the double spot above mentioned; these three spots form a sort of submarginal band from the costa to the imor margin, though not reaching either, the middle spot being much nearer the margin than the other two. Hind wing: a lunate spot at end of cell, and a submarginal series of three spots, the first small, the second out of line, being nearer the margin of the wing, and the third double.

Underside markings as above, the whole of the hind wing and the apex and costa of the fore wiug washed with yellow. Cilia above and below pale yellow.

Expanse 24 millim.
In the British Museum, from Bombay.
This is the species which has been recorded from India by Col. Swinhoe as coras of Cramer. The true coras of Cramer is, however, an American species and is the type of the genims Polites, Scudder.
Nearest allied to T'. ceramus, Hew., from which it differs in the much greater prominence of all the yellow markings.

## 2. Geluus Ampittia.

dmpittia, Moore, Lep. Ceyl. i. p. 171 (1881).
Type, maro, labr.
Antennæ short; club moderate, straiglt, tip blnut. Palpi: second joint densely clothed with laxly set scales ; third joint porrect, conspicums, slender, tip bluntly conical. Fore wing: inner margiu longer than outer margin ; cell less than two-thirds the length of costa; veiu 12 reaching costa well before the end of cell ; middle discocellular longer than lower one ; vein 5 slightly nearer to 4 than to 6 ; vein 3 in the male of the type species well before the end of cell, nearer to 2 than to 4 ; vein 3 in the female immediately before the end of cell; vein 2 nearer to end of cell than to base of wing; lower margin of cell curved upwards from base to vein 2, and angled at vein 3. Hind wiug evenly rounded; vein 7 shortly before end of cell, curving upwards from its origin, the upper margin of cell curving downwards, the angle therefore being rounded like a tnningfork and not acute ; discocellulars very faint; vein 5 not traceable; vein 3 from end of cell; vein 2 shortly before end of cell, considerably more than twice as far from base of wing as from end of cell. Hind tibie with two pairs of spurs.

Male in the type species with a short glandular streak on the
upperside of fore wing, situated immediately below the origin of vein 2, but not touching either vein 2 or vein 1. This streak is wanting in the other species of the genus.

| aro, Fabr. ................. 1. | rhadama, Boisd. |
| :---: | :---: |
| camertes, Moore. | inornatus, Trim. |
| ? dioscorides, Fabr. | pardalina, Butl. |
| cariate, Hew. |  |

To this genns would also appear to belong mirza, Mab., bernieri, Boisd., and dispar, Mab. There seems little doubt that the species described by Fabricius from Tranquebar as dioscorides is the female of maro; the latter name, however, being so well known has not been supplanted, as without examination of the type it is impossible to be quite certain that the two species are identical.
This genus appears to be confined to the Asiatic and African regions.

## 3. Genus Kedestes, nov.

'Type, lepenula, Wallgr.
Thymelicus, Trimen (nec Hübu), S. Afric. Butt. vol. iii. p. 299 (1889).

Antenuæ rather short ; club straight, tip blunt. Palpi porrect, third joint very slender. Fore wing : apex rather pointed, costa straight, outer margin longer than imner margin ; cell less than twothirds the length of costa; vein 12 reaching costa before the end of cell ; discocellulars inwardly oblique, the middle the louger; vein 5 nearer to 4 than to 6 ; vein 3 well before the end of cell, about twice as far from 2 as from 4; vein 2 almost equidistant from end of cell and base of wing. Hind wing: outer margin even; vein 7 well before the end of cell; discocellulars outwardly oblique; vein 5 barely traceable; vein 3 immediately before the end of cell; rein 2 nearer to end of cell than to base of wing, Hind tibie with two pairs of spurs.

No sexual characters on wings except in capenas, in which there is a short discal stigma on fore wing of male, running from origin of vein 2 to about the centre of vein 1; vein 2 also arises slightly nearer to end of cell in the male of this species; in the female the neuratiou is as in the other species of the genus.


## 4. Gemus Apaustus. (Plate l1I. fig. 26.)

Apanstus, Hiibn. Verz. p. 113 (1816). Type, menes, Cramer.
Antenmæ: club moderate, straight, tip blunt. Palpi : third joint long, slender, naked, erect, reaching considerably higher than the vertex of the head. Fore wing elongate, inmer margin considerably longer than outer margin ; cell short, hardly more than half the length of
costa; rein 12 reaching costa before the end of cell; upper discocellular short but distinct, almost at right angles with upper margin of cell; middle discocellular long, inwardly oblique, lower discocellular short, lower margin of cell bent abruptly upwards at rein 3, the portion between veins 3 and 4 being in the same straight line as the lower discocellular; vein 2 close to 3 , many times further from base of wing than from vein 3 . Hind wing rery narrow, the abdomen extending far beyond the anal angle ; outer margin even; rein 7 shortly before the end of cell ; discocellulars and vein 5 faint; rein 3 shortly before the end of cell, twice as far from 2 as from 4 ; rein 2 almost equidistant from end of cell and base of wings. Hind tibiæ with two pairs of spurs.

$$
\begin{array}{lcl}
\text { mones, Cram. } & & \\
\text { gracilis, Feld. } & . . & 2 .
\end{array}
$$

Confined to tropical South America.

## 5. Genus Ancyloxypha.

Ancyloxypha, Felder, Verh. zool.-bot. ${ }^{\text {.Gesellsch. Wien, xii. p. } 477}$ (1862).

Type, numitor, Fabr.
Antennæ very short; club moderate, straight, bluntly pointed. Palpi as in Adopcea. Fore wing not apically produced, costa and outer margin convex, inner margin longer than outer margin; cell less than two-thirds the length of costa; vein 12 very short, reaching costa before the centre; middle discocellular considerably longer than lower; vein 5 considerably nearer to 4 than to 6 ; lower margin of cell bent sharply upwards at rein 3 , the portion between veins 3 and 4 lying in the same straight line as the lower discocellular ; vein 3 consequently from lower angle of cell, about twice as far from 2 as from 4 ; rein 2 many times further from base of wing than from rein 3. Hind wing, onter margin even. Hind wing: vein 7 immediately before the end of cell; discocellulars sharply angled, the middle one being erect and the lower outwardly oblique; vein 5 not traceable; rein 3 shortly before the end of cell, nearer to 4 than to 2 ; vein 2 slightly nearer to end of cell than to base of wings. Hind tibire with two pairs of spurs. No sexual characters on wings.

$$
\left\{\begin{array}{l}
\text { nuimitor, Fabr. } \\
\text { puer, Hübn. }
\end{array}\right.
$$

## Habitat. North America.

The Asiatic species "Cyclopides" subvittatus, Moore, also appears to belong either to this genus or to one closely allied to it, but the only specimens I have been able to examine have been without antennæ and palpi; at any rate it does not belong to Cyclopides, from which the neuration at once separates it.

## 6. Genus Copeodes.

Copcoodes, Speyer, Stett. ent. Zeit. 1878, p. 183.
Type, procris, Felder.
Antenuæ very short ; club robust, straight, apex rounded. Palpi Proc. Zool. Soc.-1893, No. VII.
as in Adoprea. Fore wing: costa straight, outer margin rather excised for the lower half; inner margin longer than outer margin : cell less than two-thirds the length of costa; vein 12 reaching costa before end of cell; middle discocellular more than twice the length of lower ; vein 5 from close to bottom of cell; vein 3 well before end of cell in male, shortly hefore in female; vein 2 considerably nearer to end of cell than to base of wing. Hind wing : outer margin even; vein 7 well before end of cell, only slightly nearer to 6 than to 8 ; discocellulars and rein 5 barely traceable; rein 3 immediately before end of cell; vein 2 more than twice as far from base of wing as from end of cell. Hind tibix with two pairs of spurs. Abdomen slender, extending berond the anal angle of hind wings.

Male with a linear stigma, parallel to the costa, ruming along the basal third of vein 3 and continued for a short distance immediately below the lower margin of cell; the terminal two-thirds of vein $\dot{3}$ is much attenuated, the male mark apparently arresting its full development.

$$
\left\{\begin{array}{lll}
\text { *uuruntiucu, Hew. ...... } & 1 .  \tag{1.}\\
\text { procris, Felder. } & . . . . . & 2 .
\end{array}\right.
$$

Coufined to Northern and Central America.

## 7. Gemus Adopea. (Plate III. fig. 27.)

Adoprea, Billb. Enum. Ins. p. 81 (1820). Type, theumas, Hufu. Pelion, Kirby, List Brit. Rhop. (1858). Type, thaumas, Hufu.
Antennæ short, less than half the leugth of costa ; club elongate, straight or slightly arcuate, tip blunt. Palpi: second joint clothed with laxly-set scales; third joint long, slender, suberect. Fore wing : inner margin longer than outer margin; cell less than twothirds the length of costa; middle discocellular more than twice as long as lower; veiu 5 from close to bottom of cell; rein 3 close to end of cell; rein 2 (in both sexes) slightly nearer to base of wing than to end of cell. Hind wing: outer margin eren, slightly excised at rein 2; vein 7 well before end of cell, only slightly nearer to 6 than to 8: discocellulars very faint, vein 5 not traceable; vein 3 immediately before end of cell; vein 2 more than twice as far from base of wing as from end of cell. Hind tibiæ with two pairs of spurs. Abdomen slender, extending beyoud anal angle of hind wings.

Male with a linear discal stigua on the fore wing, in two portionsthe upper portion long, lying below the inner margin of cell, from the origin of vein 3 to as far as vein 2 ; the lower portion short, in continuation of the upper portion, from below vein 2 to not quite as far as vein 1 .


The species wrightii and boeta differ from the type in the more
knobbed antennæ, while hylux differs in the shape of the wings and in wanting the discal stigma in the male.

Distribution. Holarctic.

## 8. Genus Erynnis.

Erynnis, Schrank, Fanna Boica, ii. 1, p. 157 (1801).
Type, comma, Linn.
Ocytes, Scudd. Syst. Rev. p. 55 (1872). Type, metea, Scudd.
Autenme short, less than half the length of costa; club short, robust, terminal crook exceedingly minute. Palpi as in IIylephila. Neuration as in Ifylephila except that vein 2 of the fore wing is much nearer to the base of the wing in the male, and vein 7 of the hind wing is slightly nearer the base of the wing in both sexes ; the stigma on the fore wing is very similar to that of Hylephile, except that it entirely fills the angle at the bifureation of vein 2, while in Hylephila the discal stigma crosses the interspace beyond the origin of vein 2.


Distribution. Holarctic.

## 9. Genus Anthomaster.

Anthomaster, Scudd. Syst. Rev. p. 57 (1872).
Type, leonardus, Harr.
This genus does not differ appreciably from Erynnis in neuration or the stigma of the male, while the sexual organs show a remarkable similarity. The differences given by Scudder are very slight, and as far as the antennæ are concerued are absolutely imperceptible, and if it had not been separated by the greatest living authority on this group, it wonld have been unhesitatingly sunk in this paper as identical with Erynnis.
lconardus, Harris.
Confined to North America.

## 10. Genus Ochlodes.

Ochlodes, Scudd. Syst. Rev. p. 57 (1872). Type, nemorum, Boisd.
Antemne short; club stout, rather elongate, with a minute terminal crook. Palpi as in Hylephila.

Neuration as in Hylephila, except that rein 7 of the hind wing is nearer to the base of the wing.

Male with a linear discal streak on fore wing, bordered on both sides with differently formed, loosely compacted scales.

$$
\begin{aligned}
& \text { ncmorum, Boisd. .............. } \\
& \text { sonora, Sc. } \\
& \text { s.................. } \\
& \text { agricold, Boisd. ............. } \\
& \text { a. }
\end{aligned}
$$

Confined to North America.

## 11. Genus Thymelicus.

Thymelicus, Hübn. Verz. bek. Sclımett. p. 113 (1816). Type, vibex, Hübn. Hedone, Scudd. Syst. Rev. p. 58 (1872). Type, brettus, Hiibn. Pyrrhosidia, Scudd. Mem. Bost. Soc. Nat. Hist. ii. p. 346 (1874). Type, mystic, Scudd.
Antenuæ less than half the length of costa ; club rery robnst, short, crook very short. Palpi: second joint densely scaled, third joint bluntly conical, almost concealed.

Neuration of the fore wing as in Hylephila, and of the hind wing very similar except that vein 7 is slightly nearer the end of cell, and veiu 2 rather more remote from end of cell. "Discal stigma of male unnsually variable, but consisting in the main of two separated slender strigæ of dead black scales, that in the middle median juterspace linear and arcuate, that in the lower subcircular or short linear, both surrounded and sometimes almost or quite concealed by overhanging, large and broad, somewhat loosely compacted scales, and followed beyond by a field of varying size, but generally narrow, of loosely compacted, erect, dusky, reflecting scales." (Scudder, Butt. New Engl. p. 1690.)


Confined to North America.

## 12. Genus Atalopedes.

Atalopedes, Scudd. Sryst. Rev. p. 57 (1872).
Type, huron, Edw.
Pansydia, Scudd. Syst. Butt. p. 60 (1872).

> Type, сипuxa, Hew.

Auteunæ short, less than half the length of costa; club short, robust, terminal crook rery short. Palpi as in Hylephila.

Neuration as in Hylephila. "Discal stigma in male consisting of', first, a longitudinal streak at base of middle median iuterspace, of shining, black, recurred rods; second, of a semilunar field of dead black erect rods in the lowest median interspace, overhung above by long curring scales; followed below by a short, small striga of shining black scales, and outside by a large field of erect loosely compacted scales." (Scudder, Butt. New Engl. p. 1657.)


I am mable to point out the slightest structural difference between huron and mesogramma.

Confined to North Anserica.

## 13. Genus Polites.

Polites, Scudd. Syst. Rev. p. 57 (1872). Type, peckius, Kirby.
Antenuæ short, less than lalf the length of costa; club short, robust, terminal crook minnte. Palpi as in Hylephila.

Nenration as in Hylephila except that on the fore wing vein 3 is further from end of cell, being almost equidistant from 2 and 4 ; and on the hind wing, that rein 2 is nearer to the eud of the cell, vein 3 being only slightly nearer to 4 than to 2 . "Discal stigma of male consisting of an interrupted, gently arcuate or sinuate streak of dead black retrorse scale; or rods edged below, especially in the middle, with a border of similar but dust-coloured erect rods and followed beneath by an inconspicuous large area of loosely compacted, erect, dusky scales." (Scudder, Butt. New Engl. p. 1679.)

$$
\left\{\begin{array}{l}
\text { coras, Cram. } \% \text {. } \\
\text { peckius, Kirby, of. } \\
\text { u'ansutta, Harris. }
\end{array}\right.
$$

Confined to North America.

## 14. Geilus Hylephila.

Hylephila, Billb. Enum. Ins. p. 81 (1820).
Type, phylcus, Drury.
Euthymus, Scudd. Syst. Rev. p. 56 (1872).
Type, phylcus, Drury.
Antennæ rery short, hardly oue third the length of costa ; club short, robust, terminal crook exceedingly minute. Palpi: second joint densely scaled, third joint miuute, suberect, bluutly conical.

Fore wing: inner margin slightly longer than outer margin. Cell less than two-thirds the length of costa; rein 5 from close to bottom of cell; vein 3 very close to end of cell; vein 2 considerably nearer to base of wing than to end of cell, in the female this vein is slightly more remote from base of wing. Hind wing : outer margin even, slightly excised between veins 3 and $1 b$; vein 7 well before end of cell, almost equidistant from 6 and 8 ; discocellulars faint ; rein 5 not traceable; veins 2,3 , and 4 all close together, 3 about twice as far from 2 as from 4. Hind tibie with two pairs of spurs. Male with a linear discal stigma on fore wing, extending from origin of vein 3 as far as rein 1, and edged exteriorly with an outwardly diffused streak of raised scales.

> phyleuss, Drurs ......... | 1. |
| :--- |
| fasciolata, Blanch. .... |
| fulva, Blanch. ....... |.

Confined to America.

## 15. Genus Padraona.

Padraona, Moore, Lep. Ceyl. vol. i. p. 170 (1881).
Type, masa, Monre.
Antennæ : club moderate, elongate, with a short terminal crook. Palpi : second joint densely scaled; third joint short, slender, suberect, obtusely conical.

Fore wing: inner margin longer than outer margin ; cell less than two-thirds the length of costa; middle discocellular about twice as long as lower ; vein 5 considerably nearer to 4 than to 6 ; vein 3 immediately before end of cell; rein 2 almost equidistant from end of cell and base of wing, slightly nearer to end of cell. Hind wing: outer margin even, slightly excised between veins 2 and $1 b$; vein 7 well before the end of cell; discocellulars very faint, vein 5 wanting; rein 3 close to end of cell, twice as far from 2 as from 4 ; rein 2 considerably nearer to end of cell than to base of wing. In the males of some of the species there is a short and rery inconspicuous glandular streak, sitnated immediately abore the centre of rein 1 on the upperside of the fore wing. Hind tibioc mith two pairs of spurs.



And twelre unidentified species.
This genus is apparently confined to the Asiatic and Australian regions, with the exception of coroller from Madagascar, and epictetus from tropical America ; these two species are possibly not correctly assigned to Padraona, though I am unable to point out how they can be separated from it.

There is an Australian genus closely allied to Padraona which is represented in the British Museum collection by marnas, Felder, lascivia, Rosenstock, and four unidentified species. This genus differs from Padraona in its much broader wings, slightly different neuration, and in the male in some species being provided with a linear discal stigma on the fore wing.

## 16. Genus Telicota.

Astycus, Catal. Frank. p. 185 (1825). Type, augias, Linn. Telicota, Moore, Lep. Ceyl. rol. i. p. 169 (1881).

Type, augias, Linn.
Antennæ: club stont, elongate, terminal crook short. Palpi: second joint lasly scaled, third joint suberect, bluntly conical. Fore wing : inner margin longer than outer margin; cell less than twothirds the length of costa; rein 5 close to hottom of cell. In the male; rein 3 is well before the end of cell, considerably nearer to rein 2 than to 4, and rein 2 is nearer to the end of the cell than to the base of the wing. In the female vein 3 is immediately before the end of the cell, and rein 2 is nearer to the base of the wing than to the end of the cell. Hind wing: rein 7 well before the end of cell, the upper margin of cell being bent downwards at its origin ; discocellulars faint ; rein 5 not traceable; reins 2, 3, and 4 all close together; rein 3 about twice as far from 2 as from 4. Hind tibir with two pairs of spurs. Male with a linear discal stigma on the
upperside of the fore wing, extending from the base of vein 4 to as far as the submedian, being twice interrupted at veins 2 and 3.

| augias, Linn. bainbusce, Moore augiades, Felder eurotas, Felder moseleyi, Butl. |  |
| :---: | :---: |
|  |  |
|  |  |
|  |  |

And three umamed species.
Scott, in his 'Australian Lepidoptera,' has figured what he identifies as the two sexes of phineus, Cramer; the male figured is the female of cugiades, and the female appears to be a bad figure of Padraona prusias, Felder. The true phineus, described from Surinam, is in the British Museum from Ecuador and Bolivia, and is the type of a distinct genus. Mr. Butler has also wrongly identified phineus and records it from Amboina.

Hübner's name Astycus has not been adopted for this genus, as it has never been characterized, and was only published in a sale-list of Frank's collection : the trenty-two species enumerated under it belong to at least thirteen different genera.

This genus ranges from India to Australia.

## 17. Genus Augiades. (Plate II. fig. 6.)

Augiades, Hliibn. Verz. 112 (1816). Type, sylvanus, Esper.
Antennæ: club robust, elongate, terminal crook short. Palpi: second joint laxly scaled, third joint short, obtusely conical. Fore wing: inner margin slightly longer than outer margin ; cell less than two-thirds the length of costa; vein 5 from close to bottom of cell: rein 3 immediately before the end of cell; rein 2, in male considerably, in female slightly nearer to basc of wing than to end of cell. Hind wing : vein 7 well before the end of cell; discocellulars faint; vein 5 not traceable; rein 3 immediately before the end of cell, many times farther from 2 than from 4 ; rein 2 considerably nearer to end of cell than to base of wing. Hind tibix with a long fringe and with two pairs of spurs. Male with a linear discal stigma on fore wing extending from origin of vein 3 to as far as vein 1.

| sylvanus, Esper........... |
| :--- |
| 1. <br> herculea, Butler <br> venata, Bremer$.. . . . . . . . . . . . ~$ |
| 2 |

And one unidentified species.

## 18. Genus Phemiades.

Phemiades, Hübn. Verz. p. 112 (1816). Type, phineus, Cramer. Antenne rather long ; club slender, elongated, with a short terminal crook. Palpi: second joint densely scaled, third joint minute. Fore wing rery little produced at apex ; iuner and outer margins subequal ; cell less than two-thirds the length of costa. Fore wing: vein 5 close to bottom of cell; vein 3 immediately before end of cell; vein 2 considerably nearer to base of wing than to end of cell.

Hind wing broadly rounded; outer margin very slightly excised at vein 2 ; vein 7 well before end of cell; discocellulars faint; vein 5 hardly traceable; vein 3 immediately before end of cell; rein 2 well before end of cell, nearer to end of cell than to base of wing. Hind tibix with two pairs of spurs and with a long fringe of coarse hairs. No secondary sexual characters on wings.

> phineus, Oramer ......... 1.
> *utha, Hew.
> $\stackrel{1}{2} . . . . . . . . . . . . ~$

And an unidentified species.
Confined to tropical South America and the West Indies.

## 19. Genus Gegenes. (Plate III. fig. 30.)

Gegenes, Hübn. Verz. p. 107 (1816). 'Type, pygmaus, Hübu.
Philoodus, Ramb. Fanne Ent. Audal. ii. p. 308 (1840).
Type, nostrodamus, Fabr.
Antennæ very short, hardly a third the length of costa; club robust, short, terminal crook minute. Palpi: third joint hardly visible. Fore wing: outer margin longer than inner margin ; cell less than two-thirds the length of costa; rein 5 from close to bottom of cell ; vein 3 immediately before end of cell; vein 2 nearer to end of cell than to base of wing. Hind wing rather eiongated; outer margin even, slightly excised between veins 2 and $1 b$; vein 7 well before the end of cell ; discocellulars faint ; vein 5 not traceable; reins 2,3 , and 4 very close together; vein 3 about twice as far from 2 as from 4; lower margin of cell angled at vein 2. Hind tibiæ with two pairs of spurs. No secondary sexual characters on the wings of the male except in a single specimen of an unidentified species in the British Museum from Victoria Nyanza, in which there is a large ill-defined rounded spot of appressed scales on the upperside of the fore wing below end of cell.

$$
\left\{\begin{array}{l}
\text { nostrodamus, Fabr. ...... } 1 . \\
\text { pygmœus, Hübn. (nee Fabr.). } \\
\text { pumilio, Hoffm. } \\
\text { lefobrii, Ramb. }
\end{array}\right.
$$

$\left\{\begin{array}{l}\text { Karsana, Moore ......... } \\ \left\{\begin{array}{l}\text { hottentota, Latr. ........ } \\ \text { letterstedti, Wallgr. }\end{array}\right.\end{array}\right.$
And one unidentified species.
Ranges over the Mediterranean region, India, and Africa.
20. Genus Calpones.

Calpodes, Hübn. Verz. p. 107 (1816). Type, ethlius, Cram.
Antennæ: club stout; terminal crook rather long, about half the length of the rest of club. Palpi: second joint densely scaled, pressed close against the face; third joint almost entirely concealed. Fore wing: costa nearly straight; inner margin slightly longer than outer margin ; cell less than two-thirds the length of costa; vein 12 reaching costa well before end of cell; middle discocellular inwardly oblique, considerably longer than lower one; vein 5 considerably nearer to 4 than to 6 ; vein 3 shortly before end
of cell, curved strongly downwards; vein 2 slightly nearer to end of cell than to base of wing. Hind wing conspicuously lobate; vein 7 well before end of cell; discocellulars outwardly oblique; veins 2, 3, and 4 all close together; vein 3 nearer to 4 than to 2 ; lower margin of cell slightly angled at rein 2 , more conspicuously at vein 3. Hind tibiæ with two pairs of spurs. No secondary sexual characters on fore wing of male.


And four unidentified species.
Tropical American.

## 21. Genus Parnala. (Plate III. fig. 29.)

Parnara, Moore, Lep. Ceyl. vol. i. p. 166 (1881).
Type, guttatus, Brem.
Chapra, Moore, Lep. Ceyl. vol. i. p. 169 (1881).
Type, mathias, Fabr.
Antennæ: club short and stout, terminal crook very short, tip acuminate. Palpi as in Baoris. Fore wing: inner margin longer than outer margin ; cell less than two-thirds the length of costa; vein 12 reaching costa well before end of cell ; upper discocellular minnte, middle very long, lower very short; rein 5 from close to bottom of cell; neuration entircly as in Baoris. Hind tibie with two pairs of spurs. Male in some species with a linear discal streak on the fore wing, situated obliquely between veins 2 aud 1 .

Section A.-Male with a discal stigna.


Section B.-No diseal stigma in male.


The sole difference between the two genera Chapra and Parnara is the presence or absence of the sexual streak of the fore wing, a character which is certainly of no value in this genus, as it would assign two such closely allied species as borbonica and mathias to two separate genera.

This genus is closely allied to Baoris, from which it may be separated by the shape of the antemnal club.

African and Asiatic.

## 22. Genus Baoris. (Plate III. fig. 28.)

Baoris, Moore, Lep. Ceyl. vol. i. p. 165 (1881).
Type, aceia, Hewitson.
Parnara anctorum (part.).
Antennæ: club moderate, elongate, with a short terminal crook; tip acuminate. Palpi: second joint densely scaled, third joint almost entirely concealed. Fore wing : immer and outer margins subequal : cell less than two-thirds the length of costa; vein 12 reaching costa well before the end of cell; upper discocellular minute, middle discocellular very long, lower very short; vein 5 from close to bottom of cell ; vein 3 slightly curved at its base, close to end of cell, twice as far from 2 as from 4; vein 2 considerably nearer to end of cell than to base of wing. Hind wing elongated; outer margin even; rein 7 well before end of cell ; discocellulars outwardly oblique; vein 5 not traceable; veins 2,3 , and 4 all very close together; vein 3 twice as far from 2 as from 4: the lower margin of cell bent upwards at vein 2. Hind tibie with two pairs of spurs. Male in the type species with a tuft of long hairs on the upperside of the hind wing, attached along the upper margin of the cell and directed downwards across the cell. This character is not foond in any other species of the genus.

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| pagana, de Nicéville ...... 10. |  |
| :---: | :---: |
|  |  |
|  |  |
| inconspicur, Bert. |  |
| * jansonensis, Bert. ........ 1. |  |
| pellueida, Mhuray |  |
| * marscona, Hewr. | . |
| uina, de Xicérille ......... 17. |  |
| * cormassa, Hew. |  |
| colaca, M Ioor |  |
| cingalensis, 30ore. |  |
| vani, Moore |  |
|  |  |
|  |  |

African and Asiatic.

## 23. Genis Lerodea.

Lerodea, Scudd. Syst. Rev. p. 59 (1872). Type, eufala, Edw.
Antenme: club robust, slightly elongate; antennal crook short. Palpi : second joint densely scaled ; third joint erect, minute, bluntly conical. Fore wing : outer margin longer than inner margin; cell less than to o-thirds the length of costa; vein 5 from close to bottom of cell; vein 3 immediately before the end of cell; rein 2 almost equidistant from end of cell and base of wing. Hind wing: vein 7 shortly before the end of cell; discocellulars faint; vein 5 not traceable; vein 3 immediately before end of cell; vein 2 well before end of cell, but considerably nearer to it than to the base of the wing. No secondary sexual characters on fore wing of male. Hind tibie with two pairs of spurs.
cufala, Edw. .................. 1

1. | fusca, Grote \& Ralbinson ... 2
2. 

Confined to North America.

## 24. Genus Limochores.

## Limochores, Scudd. Syst. Rev. p. 59 (1872).

Type, manutaaqua, Scudd.
Antemne: club robust, rather elongate; terminal crook short. Palpi : third joint erect, short, bluntly conical. Fore wing : inner and outer margins subequal; cell less than two-thirds the length of costa; vein 5 close to bottom of cell; vein 3 immediately before end of cell ; rein 2 nearer to base of wing than to end of cell. Hind wing: vein 7 well before end of cell; discocellulars faint ; vein 5 not traceable; vein 3 immediately before end of cell; vein 2 well before end of cell, but considerably nearer to it than to base of wing. Hind tibie with two pairs of spurs, and both middle and hind tibie conspicuously spined.

Male with a linear discal stigna on upperside of fore wing from origin of vein 3 to as far as vein 1 .


Confined to North America.
25. Gemis Eupiyes.

Euphyes, Scudd. Syst. Rev. p. 69 (1872).
Type, metacomet, Harris.
Antenne: club stout, elongate, with a short terminal crook. Palpi : second joint clothed with laxly-set scales ; third joint slender, obtusely conical, projecting well beyond the clothing of the second joint. Fore wing: costa straight ; apex rather produced; inner margin considerably longer than outer margin; cell less than twothirds the length of costa; vein 5 close to bottom of cell; vein 3 shortly before end of cell; rein 2 nearer to base of wing than to end of cell. Hind wing: outer margin even; vein 7 well before end of cell; rein 3 immediately before end of cell; vein 2 considerably nearer to end of cell than to base of wing. Hind tibix with two pairs of spurs. Male with a linear glandular streak on fore wing extending from base of rein 3 to as far as vein 1.
metacomet. Harris.
Confined to North America.

## 26. Genus Oligoria.

Oligoria, Scudd. Syst. Rev. p. 61 (1872). Type, maculata, Edw.
Antennx: club rolust, elongate, with a short terminal crook. Palpi : third joint minute, ohtusely conical, almost entirely concealed. Fore wing hardly produced at apex ; inner and outer margins subequal; cell less than two-thirds length of costa; vein 5 from close to bottom of cell; vein 3 very close to end of cell; vein 2 nearer to base of wing than to end of cell. Hind wing: onter margin even, very slightly excised at vein 2 ; vein 7 well before end of cell, only slightly nearer to 6 than to 8; discocellulars and vein 5 barely traceable; vein 3 immediately before end of cell; vein 2 more
than twice as far from base of wing as from end of cell. Hind tibir with two pairs of spurs. No sexual characters on the wings. maculuta, Edw.
Halitat. Sonthern U.S.

> 27. Gemis Gehenna, nov.

Type, abima, Hew.
Antennæ and palpi as in Halpe. Fore wing: inner and outer margins subequal, rather produced at apex ; cell less than two-thirds the length of costa ; middle discocellular more than twice the length of lower one; vein 5 from close to bottom of cell; vein 3 well before end of cell; vein 2 close to base of wing. Hind wing slightly elongated; outer margin even; costa very prominently arched at base ; rein 7 shortly before end of cell ; discocellulars faint; rein 5 not traceable; rein 3 close to end of cell, twice as far from 2 as from 4; rein 2 considerably nearer to end of cell than to base of wing ; lower margin of cell not angled at veins 3 or 2 . Hind tibix with a long fringe and with two pairs of spurs.

Male with two glandular streaks on the underside of fore wing, the lower along vein 2 at its origin and the upper immediately above it on the lower margin of cell, and there is also a tuft of hairs affixed to the imer margin at extreme base of the wing and directed upwards.

* abima, Hew.

ITabitut. Macassar.

## 28. Genus Actinor, nov.

Type, radians, Moore.
Antennæ and palpi as in Halpe. Fore wing : shape and neuration as in Halpe, except that vein 2 of the fore wing is rery remote from 3, being nearer to the base of wing than to the end of cell, while in Halpe it is considerably nearer the end of cell. Hind wing: cell extending more than half across wing; vein 7 close to end of cell, arising at an acute angle; discocellulars faint; vein 5 distinctly traceable; vein 3 immediately hefore end of cell; vein 2 considerably nearer to end of cell than to base of wing. No secondary sexual characters on wings; lower margin of cell not angled at veins 2 or 3 .

> radians, Moore.

The type came from N.W. Himalayas.

## 29. Genus Halpe. (Plate II. figs. 3, 4.)

Halpe, Moore, Proc. Zool. Soc. 1878, p. 689. Type, beturia, Hew.
Antenuæ : club moderate, elongate, with a short apical crook, tip acuminate. Palpi porrect ; third joint minnte, obtusely conical. Fore wing : inner margin longer than outer margin; cell of fore wing less than two-thirds the length of costa; vein 12 reaching costa before the end of cell; upper discocellular about twice the length of lower; vein 5 considerably nearer to 4 than to 6 ; vein

3 well before end of cell, about equidistant from 2 and from 4; vein 2 nearer to end of cell than to base of wing. Hind wing evenly rounded; cell very short; vein 7 well before end of cell, at its origin vein 7 is sharply bent upwards, and the upper margin of the cell is bent downwards so that the angle is shaped like a tuning-fork; discocellulars faint; rein 5 not traceable; vein 3 from end of cell; vein 2 very much nearer to end of cell than to base of wing; lower margin of cell slightly angled at vein 2. The above is the neuration of the male; in the female rein 3 of the fore wing is slightly nearer to end of cell, and on the hind wiug vein 7 arises at an acute angle with the upper margin of eell. Hind tibio slightly fringed and with two pairs of spurs. In most species the male is provided with a linear discal stigma on the fore wing, running obliquely from the origin of vein 3 almost to the inner margin. In those species in which there is no discal stigma, the neturation of both wings of the male agrees with that of the female.

| *beturia, Нет. | 1. | gupta, de N. ......... 8. |
| :---: | :---: | :---: |
| *moorci, sp. n. | 2. | zema, Неw. |
| *homolea, Hew. ........ | 3 | brennca, Moore......... 10. |
| ( silkima, Moore. |  | astigimata, Swinhoe ... 11. |
| *cerata, Hew. ........... | 4. | honorci, de N. ........ 1: |
| varia, Murray | $\bar{v}$ | dccorata, Moore ...... 13. |
| sitala, de N. ........... | 6. | *masoni, Moore ......... 14. |
| ceylonica, Moore ...... | 7. |  |

Of the above species, astigmata, honorei, and masoni are without the discal stigma, and it is very short and inconspicuous in decorata. Similar differences in the neuration of the male and the female are found in the Asiatic genera Pithauria and Aëromachus, in both of which the male when it has no discal stigma agrees with the female in neuration, but when provided with a discal stigma differs from the female in the position of vein 3 of the fore wing and in the distortion of the bifurcation of vein 7 of the hind wing.

Confined to Southern Asia and Japan.

## Hilpe moorel, sp. hov.

H. beturia auctorum, nec Hewitsou.

Above dark brown. Fore wing: male with seven transparent white spots-two in cell, sometimes united, three subapical, and two on disk; the female has an additional opaque white spot at the centre of submedian. Hind wing with the disk suffused with paler yellowish. Cilia : fore wing grey, chequered with brown at end of veins; hind wing uniform greyish. Underside : fore wing with spots as above and with an additional row of six or seren submarginal greyishwhite spots between the veins, running parallel to the outer margin ; costa, apex, and greater part of outer margin suffused with yellowish scales. Hind wing with a conspicuous transverse white band of spots extending across wing just beyond cell from outer angle as far as submedian, the spot immediately outside cell considerably the largest ; a small whitish spot at end of cell, an incomplete submarginal row of whitish spots from anal angle, the two inner ones
prominent, remainder minute. The whole wing more or less dusted with yellowish scales. Tip of antennæ orange-yellow ; club and shaft black above, yellowish beneath; palpi dark above, greyish white below.

Expanse, of 34 mm ., 우 36 mm .
Habitat. India, Burma, Andamans.
This is the species which usually stands iu Indian collections as beturia, Hew. Hewitson, however, included two distinct species under the wame beturia, one from Celebes and the other from the Nilgiris ; as the former is the one that agrees with his description, it must be taken as the typical one.

The true beturia differs from moorei in having only four spots on the upperside in the male, two discal and two subapical, and the fringe is unicolorous throughout; in what appears to be the female there is an additional minute subapical spot, a minute indistinct spot at upper angle of cell, and the usual spot peculiar to the female on the submedian. On the underside of the hind wing all the spots are much diffused and irroratel with yellow. It is also a considerably larger insect, the male expanding 42 mm ., and the female 43 mm .

I have much pleasure in naming this species after Mr. Moore, from whom I have receired much assistance in the loan of types and other specimens.

## 30. Genus Phlebodes.

Phlebodes, Hübn. Verz. p. 107 (1816). Type, pertinax, Cram. Antennæ: club slender, elongated, terminal crook short. Palpi: second joint densely scaled ; third joint minute, bluntly conical. Fore wing: inner and outer margins subequal; cell less than twothirds the length of costa; rein 5 from close to bottom of cell; vein 3 immediately before the end of cell; vein 2 slightly nearer to end of cell than to base of wing. Hind wing: vein 7 shortly before end of cell; discocellulars faint; vein 5 not traceable; veins $2,3,4$ all close together; rein 3 about twice as far from 2 as from 4. Hind tibiæ with two pairs of spurs. Male with a linear glandular streak on upperside of fore wing.

> pertinax, Cram.

Confiued to Sonth America.

## 31. Genus Poanes.

Poanes, Scudd. Syst. Rev. p. 55 (1872).
Poanes, Scudd. Butl. New Engl. vol. ii. p. 1592 (1889).
Type, massasoit, Scudd.
Antennæ rather short; club robust, arcuate, tip acuminate. Palpi: second joint clothed with long laxly-set scales; third joint slender, cylindrical, short, bluntly pointed. Fore wing: costa nearly straight, outer margin consex, slightly shorter than imner margin ; cell less than two-thirds the length of costa; rein 12 reaching costa well before end of cell; middle discocellular considerably longer than lower one; vein 5 considerably nearer to

4 than to 6 ; rein 3 shortly before end of cell ; rein 2 almost equidistant from end of cell and base of wing. Hind wing : outer margin even; rein 7 rery close to end of cell ; discocellulars faint; rein 5 not traceable; rein 3 immediately before end of cell: rein 2 nearer to end of cell than to base of wing. LIind tibie with two pairs of rather long spurs. No secondary sexual characters on wings of male.
massasoit, Sc.

## 32. Genus Phycanissa.

Phyconassu, Scudd. Syst. Rev. p. 56 (187ン2).
Phycanassu, Scudd. Butl. New Engl. rol. ii. p. 1600 (1889).
Type, viator, Edw.
Anteme short; club straight, with a short terminal crook. l'alpi much as in Pounes, comparatively longer. Neuration of fore wing as in Poanes, except that rein 2 is perceptibly nearer to base of wing than to end of cell. Hind wing : outer margin slightly excised between reins 3 and 16 ; vein 7 well before end of cell; vein 3 from end of cell; vein 2 considerably nearer to end of cell than to base of wing. Hind tibiæ with two pairs of rather long spurs.
riator, Edw.

Confined to North Anserica.

## 33. Genus Atrytone.

Atrytone, Scudd. Syst. Rev. p. 56 (187:). 'Iype, iowa, Scudd.
Antennæ: club robust, rather elongate, terminal crook short. Palpi : second joint laxly scaled ; third joint minnte, bluntly conical. Fore wing: inner margin longer than outer margin ; cell less than two-thirds the length of costa; rein 5 from close to botton of the cell ; rein 3 very close to end of cell ; rein 2 considerably nearer to base of wing than to end of cell. Hind wing evenly rounded; vein 7 shortly before end of cell; discoccllulars faint; rein 5 not traceable; vein 3 from end of cell; rein 2 nearer to end of cell than to base of wing. Hind tibie with two pairs of spurs. No sexual characters on wings.


And two unidentified species.
Confined to America.

## 34. Genus Cupitha.

Cupitha, Moore, Journ. As. Soc. Beng. pt. ii. 1884, p. 47.
Type, tympanifera, Moore.
Antenue : club moderate, straight, with a short terminal crook, tip acuminate. Palpi : second joint densely scaled; third joint minute, obtnsely conical. Fore wing : inner margin [in $\left.\delta^{*}\right]$ convex towards
the base, subequal to outer margin ; cell less than two-thirds the length of costa; vein 12 reaching costa before end of cell; middle discocellular considerably longer than lower one; vein 5 considerably nearer to 4 than to 6 ; vein 3 well before end of cell; rein 2 slightly nearer to base of wing than to end of cell. Hind wing: outer margin even; vein 7 immediately before end of cell ; discocellulars faint; vein 5 not traceable. Female: reins 2, 3, and 4 all close together; rein 3 about equidistant from 2 and 4 ; vein 2 more than twice as far from base of wing as from end of cell. Male: with a circular glandular patch on hind wing at origin of rein 2 , distorting the lower margin of cell, and altering the relative positions of veins 2,3 , and 4 . The male is also furnished with a short tuft of hair attached to the underside of the fore wing close to the origin of vein 1 .

$$
\left\{\begin{array}{l}
\text { purrca, Moore. } \\
\text { tympanifera, Moore. }
\end{array}\right.
$$

These two forms occur together in Burma, Sikhim, and the Nilgiris, and the differences between them appear too slight to justify their separation.

## 35. Genus Onryza, hov. (Plate II. fig. 5.)

Type, meikitila, de N.
Antennæ and palpi as in Hulpe. Fore wing : inner margin considerably longer than outer margin; cell less than two-thirds the length of costa; rein 12 reaching costa well before end of cell ; middle discocellular considerably longer than lower one; vein 5 nearer to bottom of cell than to vein 6 ; vein 3 well before end of cell, about equidistant from 2 and 4 ; vein 2 nearer to end of cell than to base of wing. Hind wing: outer margin evenly rounded; vein 7 well before end of cell, straight, upper margin of cell curving downwards at the bifurcation; discocellulars ontwardly oblique; vein 5 not traceable ; reins 2,3 and 4 all close together, lower margin of cell bent upwards at rein 2. Hind tibia with two pairs of spurs, the upper pair minute. Male with a patch of loug recumbent hairs on the upperside of the hind wiug, attached along rein 8 from close to the base of the wing.
meikita, de $\mathbf{N}$.
Habitut. Burma.

## 36. Genus Notocrypta.

Notocryptu, de Nicéville, Journ. Bomb. Nat. Ilist. Soc. ir. p. 188 (1889).

Type, curvifascia, Felder.
Plesioneura,Felder, Wien. ent. Monat. ri. p. 29 (1862), nom. præoc. Type, curvifascia, Felder.
Antennæ: club moderate, with a short terminal crook. Palpi: second joint densely scaled; third joint almost concealed, bluntly conical. Fore wing : inner and outer margins subequal ; cell less than two-thirds the length of costa ; vein 12 reaching costa almost opposite
end of cell ; discocellulars suberect, the middle one considerably the longer ; vein 5 much nearer to 4 than to 6 ; vein 3 close to end of cell; vein 2 considerably nearer to base of wing than to end of cell. Hind wing : outer margin even; vein 7 close to end of cell, more than twice as far from 8 as from 6 ; discocellulars and rein 5 rery faint; rein 3 immediately before end of cell ; rein 2 nearer to end of cell than to base of ming; lower margin of cell inconspicuously angled at rein 2. Hind tibie with two pairs of long spurs.

| curvifascia, Felder ...... 1. | * allifascia, Moore . |
| :---: | :---: |
| restricta, Moore ........ 2. | * insulata, Butler |
| $\{$ feisthumelii, Boisd. ...... 3. | * proserpina, Butler |
| ( alysos, Moore. | basiflava, de Xicérille |

And two unidentified species.
The curvifascia of Felder has been identified br some authors as identical with alysos, Moore ; however, this does not seem to be the case, as in alysos there is an opaque white spot above the tramsparent white band on the underside of the fore wing, which is wauting in typical Chinese specimens of curvifascia. This latter species is therefore nearer to restricta, Moore, from which it may be distinguished by the lowest spot of the discal band being much indented; this, however, may be simply varietal, as the true restricta also occurs in China, and the spot above referred to is frequently slightly indented in Indian specimens of that species.

Alysos, Moore, must sink as a synonym of feisthamelii, Boisd., of which there are typical specimens in the British Museum which are absolutely inseparable from Indian specimens of alysos; this species can be readily identified by the costal opaque spot on the underside of the fore wing.

Ficulnea, Hew.=signata, Drnce, and tola, Hew., are superficially rery like species of Notocrypta, but their nenration is entirely different, and, as alrendy suggested by Mr. de Nicérille, they require a separate genus.

Notocrypta is confined to Southern Asia.

## 37. Geums Udaspes.

Udaspes, Moore, Lep. Ceyl. vol. i. p. 177 (1881). Type, folus, Cram.
Antenure : club moderate, with a short terminal crook. Palpi: second and third joints porrect ; third joint minute, blantly conical. Fore wing: inner margin slightly longer than outer margin ; cell less than tro-thirds the length of costa; vein 12 reaching costa just before end of cell; discocellulars suberect, the middle one considerably the longer; vein 5 much nearer to 4 than to 6 ; vein 3 close to end of cell; vein 2 considerably nearer to base of wing than to end of cell. Hind wing : outer margin even; rein 7 immediately before end of cell; discocellulars and rein 5 very faint; vein 3 immediately before end of cell ; vein 2 about twice as far from base of wing as from end of cell ; lower margin of cell inconspicuously
Proc. Zool. Soc.-1893, No. VIII.
angled at vein 2. Hind tibiæ almost naked, with two pairs of spurs. No secondary sexual characters on wings.

$$
\left\{\begin{array}{l}
\text { folus, Oram. } \\
\text { cicero, Fabr. }
\end{array}\right.
$$

Confined to Sonthern Asia.

## 38. Geuus Baracus.

Baracus, Moore, Lep. Ceyl, i. p. 162 (1881). Type, vitattus, Felder.
Antennæ: club moderate, tip recurved, acuminate. Palpi porrect, conspicuous; second joint laxly clothed with long scales; third joint prominent, acuminate. Fore wing : inner margin longer than outer margin; cell less than two-thirds the length of costa; vein 12 reaching costa before end of cell; vein 11 curving upwards and ruming very close to, though not quite touching, vein 12; middle discocellular considerably longer than lower one; vein 5 much nearer to 4 than to 6 , but not from bottom of cell; vein 3 close to end of cell, twice as far from 2 as from 4 ; vein 2 twice as far from base of wing as from 3, nearer to end of cell than to base of wing. Hind wing evenly rounded; rein 7 immediately before end of cell; vein 5 not traceable ; discocellulars faint ; rein 3 immediately before end of cell; vein 2 more than twice as far from base of wing as from end of cell. Hind tibix fringed and with two pairs of spurs.

| vittutus, Felder | 1. | Iepeletieri, Latr. |
| :---: | :---: | :---: |
| subditus, Moore | $\xrightarrow{2}$ | tsita, Trim. |
| septentrionum, WoodMason, de Niéville.. |  | inornatus, Tr |

And four unnamed species.
Trimen puts lepeletieri and its allies into Cyclopides, from which, however, they may be readily distinguished by veins 11 and 12 of the fore wing not amastomosing, and by several minor points of neuration, and also by the formation of their antenne and palpi.

Confined to Africa and the Oriental region.

## 39. Genus Astictopterus.

Astictopterus, Felder, Wien. ent. Monat. iv. p. 401 (1860).
Type, jama, Felder.
Antenne : club slender, tip recurved, acuminate. Palpi porrect; third joint short, obtusely conical. Fore wing: imer margin longer than outer margin; cell less than two-thirds the lengti of costa: vein 12 reaching costa before end of cell; vein 11 curving upwards shortly after its origin and ruming close to, but not touching, vein 12; middle discocellular considerably longer than lower one; vein 5 much nearer to 4 than to $(6$, but not from close to bottom of cell; vein 3 well before end of cell, more than twice as far from 2 as from 4 ; vein 2 slightly nearer to 3 than to base of wing. Hind wing evenly rounded; vein 7 shortly before end of cell; discocellulars and vein 5 very faint; vein 3 shortly before end of cell, twice as far from 2 as from 4 ; vein 2 nearer to end of cell
than to base of wing. Hind tibiæ naked and with two pairs of long spurs.

| jama, Felder <br> olivascens, Moore |
| :---: |
|  |  |

And one unidentified species.
A very heterogencous collection of species have been described as belonging to this genus, most of which beloug to the genera Kerana, Sancus, Koruthaialos, Iumbrix, and Baracus. Of the remainder, argenteo-ornatus, Hew., croites, Hew., and cynone, Hew., belong to Hesperilla or a closely allied genus; dhanada, Moore, aurivittata, Moore, and ladana, Butler, belong to Celcenorrhinus; while ornatus, Bren., and unicolor, Brem., belong to Heteropterius.

Comfined to Southern Asia.

## 40. Geius Kerana.

Keranu, Dist. Rhop. Mal. p. 402 (1886). Type, armatus, Druce. Autennæ long; club moderate, recurved at tip. Palpi: second joint densely scaled; third joint almost eutirely concealed. Fore wing: imer margin longer than outer; cell less than tivo-thirds the length of costa; vein 12 reaching costa before end of cell; middle discocellular quite twice the length of lower one; vein 5 from close to bottom of cell ; vein 3 well before end of cell ; vein 2 almost equidistant from vein 3 and base of wing. Hind wing : outer margin evenly rounded; vein 7 shortly before end of cell; discocellulars and vein 5 faint, but not fully developed; vein 5 nearer to 4 than to 6 ; vein 3 well before end of cell, nearer to 4 than to 2 ; vein 2 nearer to end of cell than to base of wing. Hind tibie clothed with short recumbent scales and with two pairs of spurs.

The male of the type species differs from the other species of the genus in being provided with a patch of appressed scales occupying the entire cell of the bind wing on the npperside, and giving it a velrety appearance, and with a similar ill-defined patch tuwards the base of the hind wing on the underside. A somerwhat similar male character is found in the genus Trichosemeia, Holland. The other species of the genus are without secondary male characters.

$$
\begin{gathered}
\text { armatus, Druce ......... } \\
\text { 1. } \\
\text { * gemmifer, Butler ...... } \\
\text { diocles, Moore ........ } \\
\text { d. }
\end{gathered}
$$

The "Astictopterus" inornutus of Butler also apparently belongs to this genus, but the type is in too bad condition to enable the point to be decided.

Confined to Suuthern Asia.

## 41. Genus Katreus, nov.

Type, jo7nstonii, Butler.
Antennæ very long; club slender, recurved, apex acuminate. Palpi as in Kerana. Fore wing: inner margin longer than outer margin ; cell less than two-thirds the length of costa; vein 12 reaching
costa before end of cell; upper muryin of cell sharply bent downwards at vein 8 ; veins 7 and 6 well below the angle; upper discocellular considerably longer than lower; vein 5 much nearer 4 than 6, but not from close to bottom of cell ; vein 3 well before end of cell, twice as far from 2 as from 4 ; vein 2 about equidistant from vein 3 and base of wiug. Hind wing evenly rounded; vein 7 well before end of cell; discocellulars and rein 5 faint; vein 3 immediately before end of cell ; rein 2 considerably nearer to end of cell than to base of wing. Hind tibiæ in the male only with terminal spurs, the ventral surface thickly set with short spines; the dorsal surface with a long fringe and also a long tuft of hairs attached near the proximal end.
*jolnstonii, Butler.
Allied to Kerana.
Confined to Africa.

## 42. Genus Ancistroides.

Ancistroides, Butler, Trans. Ent. Soc. 1874, p. 436.
Type, longicornis, Butler.
Antemæ very long ; club slender, recurved, tip acuminate. Palpi as in Kerana. Fore wing : inner margin longer than outer margin; cell less than two-thirds the length of costa; vein 12 reaching costa before end of cell; middle discocellular quite twice as long as lower one: vein 5 from close to bottom of cell; rein 3 shortly before end of cell; vein 2 much nearer to base of wing than to vein 3. Hind wing evenly rounded; vein 7 shortly before end of cell; discocellulars and vein 5 barely traceable ; rein 3 immediately before end of cell, many times farther fron 2 than from 4; vein 2 nearer to end of cell than to base of wing. Hind tibiæ with two pairs of spurs and slightly clothed with short recumbent scales.

$$
\begin{gathered}
\text { longicornis, Butler ...... } \\
\text { * othonias, Hew. } \\
\hline
\end{gathered}
$$

This genus is nearest allied to Ferana, but differs from it markedly in the position of the median branches of both wings.

Longicornis is from Timor and othonias from Borneo.

## 43. Geuus Pirdana.

Pirdana, Distant, Rhop. Mal. p. 376 (1886).

> Type, hyela, Hewitson.

Antenne long; club slender, tip recurved, acuminate. Palpi: second joint densely scaled, third joint minute. Fore wing: inner and outer margins subequal ; cell less than two thirds the length of costa: vein 12 reaching costa well before end of cell; upper discocellular minute, lower and middle discocellular inwardly oblique, the middle one considerably the longer; vein 3 rery close to end of cell; veinlet in cell just beyond vein 3 ; rein 2 less than twice as fa: from end of cell as from base of wing. Hind wing: outer margin even, lobe inconspicuous; cell short, not reachiug half across wing; vein 7 just before end of cell, more than three times as far from 8 as
from 6 ; discocellulars outwardly oblique; rein 5 wanting; vein 3 just before end of cell; vein 2 twice as far from bass of wing as from end of cell. Hind tibie with two pairs of spurs.

> * hyyela, Herr. .................... 1. ismenc, Feld. ................ is

Confined to Southern Asia.

> 44. Genus Pardaleodes.
> Paidaleodes, Butl. Ent. Monthl. Mag. vii. p. 96 (1870). Type, edipus, Cram.

Antennæ rather long ; club slender, elongate, with a short recurved crook. Palpi : second joint densely scaled, third joint suberect, short, bluntly conical. Fore wing: inner margin longer than outer margin : cell less than two-thirds the length of costa; vein 12 reaching costa almost opposite the end of cell ; vein 11 rumning very close to but not actually touching vein 12 for a portion of its length; middle discocellular half as long again as lower one; vein 5 considerably nearer to 4 than to 6 ; vein 3 shortly before end of cell, about twice as far from 2 as from 4; vein 2 slightly nearer to end of cell than to base of wing. Hind wing : outer margin evenly rounded; vein 7 shortly before end of cell; discocellulars and rein 5 very faint; vein 3 immediately before end of cell; rein 2 twice as far from base of wing as from end of cell. Hind tibiæ with two pairs of spurs. No secondary sexual characters on the wings.

$$
\begin{aligned}
& \text { eclipus, Cram. ........... 1. } \\
& \text { * sator, Doubl., Hew. ... .. coanza, Plötz ............ } 4 .
\end{aligned}
$$

Confined to Africa.
45. Genus Ceratrichia. (Plate III. fig. 24.)

Ceratrichia, Butler, Cat. Fabr. Lep. p. 27-4(1869).
Type, nothus, Fabr.
Antennæ very long and sleuder, almost as long as the body; club slender, elongate, with a short terminal crook, tip acuminate. Palpi: third joint concealed in the clothing of second joint. Fore wing: imner margin longer than outer margin; cell less than two-thirds the length of costa; vein 12 reaching costa almost opposite the eud of cell; middle discocellular abont twice the length of lower one; vein 5 considerably nearer to 4 than to 6 ; vein 3 immediately before end of cell ; rein 2 nearer to end of cell than to base of wing. Hind wing : outer margin even; vein 7 shortly before end of cell; discocellulars and vein 5 barely traceable; vein 3 immediately before end of cell ; vein 2 twice as far from base of wing as from end of cell. Hind tibie with twn pairs of spurs. No secondary sexual characters on wings of male.

$$
\begin{aligned}
& \text { nothus, Fabr. ...... 1. plocion, Fabr. ..... } 4 . \\
& \text { * aretina, Hew. ....... 2. * fler'a, Hew. .......... } 5 . \\
& \text { argyrosticta, Plötz. } 3 .
\end{aligned}
$$

And two unidentified species.
This genus is confined to the African region.

## 46. Genus Plastingla.

Plastingia, Butler, Ent. Mon. Mag. vol. rii. p. 95 (1870).
Type, flavescens, Felder.
Antennæ long; club slender, with a recurred terminal crook, tip acuminate. Palpi well separated, second joint densely scaled, third joint minute, obtusely conical. Fore wing: outer margin considerably longer than inner margiu; cell less than two-thirds length of costa ; rein 12 reaching costa well before end of cell; discocellulars inwardly oblique; middle one considerably longer than lower ; rein 5 considerably nearer to 4 than to 6 ; vein 3 well before end of cell; vein 2 close to base of wing, more than trice as far from end of cell as from base of wing; lower margin of cell slightly arched between reins 2 and 3 . Hind wing slightly elongate, outer margin even; rein 7 well before eud of cell, only. slightly nearer to 6 than to 8 ; discocellulars faint ; vein 5 not traceable; vein 3 well before end of cell, almost equidistant from 2 and 4 ; vein 2 considerably nearer to end of cell than to base of wing ; lower margin of cell slightly angled at vein 2. Hind tibix with two pairs of spurs. No secondary sexual claracters on wings of male.


And one unnamed species. Tesselluta differs considerably in neuration from the type and only donbtfally belongs to this genus.

Other species of the genus are margherita, Doherty, and noemi, de Nicérille.

This genus is confined to Southern Asia.

## 47. Gemus Lerema.

Leremu, Scudd. Syst. Rev. p. 61 (1872). Type, accius, Smith-Abb.
Antennæ: club rohust, elongate, with a short terminal crook; second joint of palpi densely scaled; third joint erect, short, obtusely conical. Fore wing : outer margin considerably longer than inner margin ; cell of fore wing less than two-thirds the length of costa ; reiu 12 reaching costa almost opposite the end of cell; middle discocellular more than twice as long as lower discocellular ; vein 5 from close to bottom of cell; vein 3 well before end of cell, about three times as far from 2 as from 4 ; vein 2 considerably nearer to base of wing than to end of cell. Hind wing rather elongate, outer margin even; vein 7 shortly before end of cell; discocellulars very faint; rein 5 not traceable; reins 2,3 , and 4 all close together; vein 3 about twice as far from 2 as from 4; rein 2 considerably nearer to end of cell than to base of wing; lower margin of cell slightly angled at vein 2. Hind tibia with two pairs of spurs.

Male with a linear glandular streak on upperside of fore wing extending from the base of rein 3 as far as rein I.

$$
\begin{aligned}
& \text { accius, Sm. Abb. ......... } \\
& \text { hianna, Scudd. ............ } \\
& 2
\end{aligned}
$$

Confined to North America.
48. Genus Pithauria.

Pithariu, Moore, P. Z. S. 1878, p. 689. Type, murdava, Moore.
Pithauriopsis, W'.-Mason ©S de Nicéville, Jouru. As. Snc. Beng. 1886, p. $38 \%$

Type, ailchisoni, W. M. \& de N.
Antenne: club slender, elongate, with a rather long and very slender terminal crook. Palpi : second joint pressed close against face, third joint minute. Fore wing rather produced at apex, imner and outer margins subequal; cell less than two-thirds the length of costa; vein 12 reaching costa well before end of cell; upper discocellular minute, middle very long, lower very short ; rein 5 from very close to bottom of cell; vein 3 equidistant from 2 and 4 ; vein 2 slightly nearer to end of cell than to base of wing. Hind wing elongated, outer margin even; cell short, not reaching half across wing ; rein 7 shortly before end of cell, both reins curved at the bifurcation; discocellulars outwardly oblique; vein 5 not traceable; veins 2, 3, and 4 all very close together, the lower. margin of the cell bent upwards at origin of rein 2. Hind tibix with two pairs of spurs.

In the male the fore coxa are conspicuously tufted. The only differences between Pithauria and Pithauriopsis are that in the latter the male is furnished with a pair of glandular spots on the upperside of the fore wing between veins 1 and 2, and that at the bifurcation of vein 7 of the hind wing the veins composing the fork are more curved; this, however, is a character which for some unknown reason appears to occur in correlation with glandular patches or streaks on the fore wing. The female of aitchisoni has not been described, but will almost certainly be found to have the reins at the origin of vein 7 of the hind wing straight, so that vein 7 would arise at an acute angle.

$$
\begin{aligned}
& \text { murdaia, Moore ......................................... } \\
& \text { stramineipennis, Wood-Mason, de Nicéville ...... } \\
& \text { aitchisoni, Wood-Mason, de Nicéville ................ } \\
& \hline
\end{aligned}
$$

Confined to the Oriental region.

## 49. Genus Niconiades.

Niconiades, Hübn. Exot. Schmett. ii. (1816 -21).

Goniloba, Westw. Gen. Dinm. Lep. p. 512. $\}^{\text {Hübn. }}$ (1852).

Antennæ rather long; club slender, elongated, with a slender elongated crook. Palpi: second joint densely scaled, pressed close against the face, third joint erect, minute, bluntly pointed. Fore
wing: outer margin longer than inner margin; cell less than twothirds the length of costa; vein 12 reaching costa almost opposite the end of cell; discocellulars inwardly oblique, midadle one very much longer than the lower one; vein 5 very close to bottom of cell; vein 3 shortly before end of cell; vein 2 considerably nearer to base of wing than to end of cell. Hind wing very elongate: vein 7 shortly before end of cell; rein 3 shortly before end of cell, about twice as far from 2 as from 4; vein 2 considerably nearer to end of cell than to base of wing. Hind tibiz with two pairs of spurs.

In the male there are three short longitudinal glandular streaks on the upperside of the fore wing, one in the fork of vein 2, the second immediately below vein 2 , and the third immediately above vein 1.

$$
\begin{aligned}
& \text { vanthaphes, Hübn. ...... } 1 . \\
& \text { *cydia, Нет. ............... } \\
& 2 .
\end{aligned}
$$

Confined to tropical America.

## 50. Genus Cobalus.

Cobalus, Hiibn. Verz. p. 115 (1816). Type, virlius, Cram.
Antemre: club moderate, with a long slender terminal crook. Palpi : second joint very densely scaled, pressed close against the face, third joint minute, obtusely conical. Fore wing : inner margin longer than outer margin; cell less than two-thirds the length of costa: vein 12 reaching costa before end of cell; middle discocellular inwardly oblique, many times longer than the lower one; vein 5 close to bottom of cell; vein 3 shortly before end of cell; vein 2 almost equidistant from end of cell and base of wing. Hind wing rather produced on subcostal area; outer margin excised between veins 3 and $1 b$; vein 7 well before end of cell; veins 2,3 , and 4 all close together, vein 3 about twice as far from 2 as from 4; vein 2 considerably nearer to end of cell than to base of wing. Hind tibie with two pairs of spurs.

No secondary sexual characters on trings of male.

> uirbius, Cram. ........ 1.
> uphyscclia, Hew. ........

And an unidentified species.
Confiued to South America.

## 51. Genus Lychnuchus.

Lychnuchus, Hübner, Zutr. iii. p. 24 (1825). Type, olenus, IIïbn.
Antemme: club moderate, elongate, terminal crook rather long and slender. Palpi: second joint densely scaled, pressed close against the face, the third joint entirely concealed. Fore wing: costa slightly arched at base, then straight to apex : imer and outer margins subequal; cell less than two-thirds the length of costa; vein 12 reaching costa shortly before end of cell; middle discocellular considerably longer than lower one; vein 5 from close to bottom of cell; vein 3 well before end of cell; vein 2 more
than twice as far from end of cell as from base of wing in the male of the type species, rather farther removed from base in the female of the type and in both sexes of the other species. Hind wing : onter margin excised between reins 3 and $1 b$; vein 7 well before end of cell, only slightly nearer to 6 than to 8 ; discocellulars faint; rein $\overline{0}$ wanting; vein 3 close to end of cell, about twice as far from 2 as from 4; vein 2 considerably nearer to end of cell than to base of wing; lower margin of cell slightly angled at vein 2 , more conspicuously at rein 3. In the male of the type species there are two linear streaks of modified scales on the upperside of the fore wing at the origin of vein 2 , running for a short distance along vein 2 and the lower margin of the cell respectively.

$$
\begin{gathered}
\text { olenus, Hübn. ...... } \\
{ }_{\text {* }}^{0=i a s,} \text { Hew. ............ } \\
\end{gathered}
$$

The olenus of Huibner appears to be identical with celsus, Fabr. Confined to South America.

## 52. Gelus Carystus.

Carystus, Hiibn. Verz. p. 114 (1816). Type, jolus, Cram.
Autenne rather short ; club robust, elongate, with a long terminal crook. Palpi : third joint almost entirely concealed in the clothing of the second joint. Fore wing produced at apex, imner margin longer than onter margin; cell less than two-thirds the length of costa; vein 5 cousiderably nearer to 4 than to 6 ; vein 3 shortly before end of cell. Hind wing: outer margin even, excised between reins 3 and 16 ; rein 7 well before end of cell; discocellulars faint, vein 5 barely traceable; vein 3 from end of cell; vein 2 more than twice as far from base of wing as from end of cell. Hind tibiee with two pairs of spurs.

And three unidentified species.
Coufined to Central and South America.

## 53. Genus Lotongus.

Lotonyus, Dist. Rhop. Mal. p. 371 (1886). Type, calathus, Hew.
Antennæ of moderate length, with a long terminal crook. Fore wing: inner and outer margins subequal ; cell less than two-thirds the length of costa; middle discocellular considerably longer than lower one; vein 3 close to end of cell; vein 2 nearer to base of wing than to end of cell, almost equidistant from rein 3 and base of wing. Hind wing : outer margin even; vein 7 well before end of cell; discocellulars and vein 5 faint; rein 3 immediately before end of cell; vein 2 considerably nearer to end of cell than to base of wing. Hind tibiæ with two pairs of spurs.

[^10]Habitat. Sumatra.

## 54. Genus Thracides.

Thracides, Hübn. Verz. p. 105 (1816). Type, phidon, Cram.
Antenne: club elongate, with a long slender terminal crook. Palpi : second joint densely scaled, pressed close against the face; third joint almost entirely concealed, bluntly conical. Fore wing: inner margin longer than outer margin; cell less than two-thirds the length of costa; vein 12 reaching costa almost opposite end of cell; middle discocellular very oblique, lower very short : vein 5 from close to bottom of cell; vein 3 shortly before end of cell; vein 2 almost equidistant from base of wing and cud of cell. Hind wing rather clongate, anal angle slightly lobate; vein 7 well before end of cell; discocellulars outwardly oblique: rein 3 close to end of cell, twice as far from 2 as from $\dot{4}$; rein 2 considerably nearer to end of cell than to base of wing: y per margin of cell bent downwards at rein 7 ; lower margin of cell slightly angled at vein 2 , more conspicuonsly at vein 3. Hind tibiæ with a dense fringe and two pairs of spurs.
Male with a very inconspicuous linear discal stigma on the upperside of fore wing, from just before origin of vein 3 in as far as the submedian, usually more or less incomplete.
my

There is an undescribed genus closely allied to Thracides, including telmela, Herr., cloanthus, Latr., and others, which appear to mimic species of Pyrrhopyge.

Confined to tropical America.

## 55. Genus Talides.

Talides, Hübn. Verz. p. 106 (1816). Type, sergestus, Cram.
Antemæ and palpi as in Perichares. Fore wing differs from Perichares in not being sn much produced apically, in the onter and inner margins being subegual, and in vein 3 being very much nearer to the end of the cell. Hind wing as in Perichares but less elongate, being more produced in the subcostal area. Hind tibio and femora less densely fringed than in Perichares, and the upper pair of spurs are very short. Linear stigma on fore wing of male as in Perichares.

$$
\begin{aligned}
& \text { sergestus, Cram. ...... !. | *chiomara, Hew. ...... } 4 . \\
& \text { sinon, Oram. ......... :- }
\end{aligned}
$$

$$
\begin{align*}
& \text { phidon, Cramer ...... 1. *cincia, Hew. ............ t. }  \tag{4.}\\
& \text { * cilissa, Hew. ......... } \because . \\
& \text { "̈nanea, Hew. ......... シ. } \\
& \text { *icincia, Hew. } \\
& \text { * } \text { rcesia, Hew. }
\end{align*}
$$

Confined to tropical America.

## 56. Genus Perichares.

Perichares, Scudd. Syst. Rev. p. 60 (18i2). Type, corydon, Fabr.
Antennæ: club robnst, elongated, with a long terminal crook; second joint of palpi very densely scaled, the third joint almost entirely concealed. Fore wing produced at apex, onter margin very much longer than inner margin ; cell less than two-thirds the
length of costa; rein 5 considerably nearer to 4 than to 6 ; vein 3 mell before end of cell; vein 2 almost equidistant from vein 3 and base of wing. Hind wing elongate, outer margin even; vein 7 well before end of cell; discocellulars faint, vein 5 not traceable; rein 3 immediately before end of cell; rein 2 twice as far from base of wing as from end of cell; lower margin of cell angled at vein 2. Hind tibie with two pairs of spurs. There is a very dense fringe on the hind tibire and femora and also on the middle femora.

Male with a linear discal stigma extending from the base of vein 3 to as far as rein 1.

$$
\begin{aligned}
& \text { corydon, Fabr. ............... } 1 \\
& \text { fultimargo, Butler............ } 2 .
\end{aligned}
$$

Confined to tropical America.

57. Genus Unkasa.

Unkana, Dist. Rhop. Mal. p. 369 (1886). Type, buturu, Dist.
Antenne long; club moderate, elongated, with a long terminal crook. Palpi: second joint densely scaled, third joint almost concealed. Fore wing produced at apex, outer margin considerably longer than inner margin ; cell of fore wing less than two-thirds the length of costa; discocellulars inwardly oblique; vein 5 considerably nearer to 4 than to 6, but not from close to bottom of cell (except in elia) ; vein 3 well before end of cell; vein 2 almost equidistant from vein 3 and base of wing. Hind wing prodnced in the subcostal area, outer margin even, conspicuonsly excised between veins 3 and 16 ; vein 7 well before end of cell; discocellulars and rein 5 very faint; vein 3 well before end of cell, about twice as far from 2 as from 4 ; vein 2 considerably nearer to end of cell than to base of wing. Hind tibiæ with two pairs of spurs.

| batara, Dist. ........ | 1. | semamara, Moore ... |
| :---: | :---: | :---: |
| *attina, Herr. | 2. | watsonii, de Nicér. ... |
|  |  |  |

It seems rery doubtful if all the above are congeneric. There are no sexual characters on the wings of Uaturu, attina, or watsonii. In the male of elia there is a short discal stigma on the upperside of the fore wing extending from the base of rein 3 to just beyond vein 2 , and there is also a tuft of hairs on the underside of the fore wing at the origin of rein 1; in semamora there is no discal stigma but there is a tuft of hairs similarly situated to that of elia. Semamora, watsonii, and elia all differ slightly in neuration from batara, and the two former also differ in the crook to the antemm being very short. All these species, however, seem to be conreniently included under Unkaina for the present.

Is batara identical with cruda, H.-S.?
Confined to the Oriental region.

## 58. Genus Hidari.

Hidari, Dist. Rhop. Mal. p. 395 (1886). Type, irava, Moore.
Antenme long; club robust, elongated, with a long terminal crook. Palpi : second joint very densely scaled, third joiut almost entirely
concealed. Fore wing: outer margin longer than inner margin; cell less than two-thirds the length of costa ; discocellulars inwardly oblique; vein 5 from close to bottom of cell; vein 3 well before end of cell; vein 2 almost equidistant from end of cell and base of wing. Hind wing slightly lobate, outer margin even ; vein 7 well before end of cell ; discocellulars and vein 5 faint ; veins 2, 3, and 4 all close together ; vein 3 almost equidistant from 2 and 4 ; vein 2 more than twice as far from base of wing as from end of cell. Hind tilixe with two pairs of spurs, the upper pair short.

$$
\left.\begin{array}{l}
\text { irraea, Moore. } \\
\text { *hypepar, Hew. }
\end{array}\right\}
$$

Confined to the Oriental region.

## 59. Genus Pteroteinon, nor.

Tanyptera, Mabille, Bull. Soc. Zool. France, p. 260 (1877), nom. preoc.

Type, laufella, Hewitson.
Antennæ: club rather robust, about one-third the length of shaft, bent at about a right angle, terminal portion short, about half the length of remainder of club. Palpi : second joint thickly scaled, third joint minute. Fore wing: outer margin longer than imer margin; vein 12 reaching costa before end of cell; veins 6 and 7 from upper end of cell; upper discocellular non-existent; middle discocellular inwardly oblique, angled at its lower end ; lower discocellular very short, about half the length of middle one; vein 3 near end of cell, about five times as far from base of wing as from end of cell; vein 2 equidistant from base of wing and from vein 3; veinlet in cell just before vein 4. Hind wing : lobe inconspicuous; vein 7 twice as far from base of wing as from end of cell; discocellulars outwardly oblique; rein 5 well developed; vein 3 just before end of cell; vein 2 three times as far from base of wing as from end of cell. Hind tibiæ with two pairs of spurs, and with a double fringe of densely set setr.

> *laufella, Hew.

Confined to Africa.

## Synopsis of Genera of Pamphilinat. <br> Section C.

a. Vein 5 of hind wing well developed.
$a^{\prime}$. Vein 3 of hind wing immediately before end of cell.
$a^{2}$. Club of autenne longer than shaft.
Ismene, Swainsou. Type, adipodcu, Swains. (1)
$b^{2}$. Shaft of antemme longer than club.
$a^{3}$. Vein 1 of fore wing distorted downwards near base,
Hasora, Monre. Type, badra, Moore. (2)
$b^{3}$, Vein 1 of fore wing not distorted near base.
Bibasts, Moore. Type, sena, Moore. (i)
li. Vein 3 of hind wing well before end of cell.

Badamia, Moore. Type, paclamationis, Fabr. (4)
b. Vein 5 of hind wing wanting.

Rhoralocampta, Wallgr. Type, forestan, Cram. (5)

## 1. Genus Ismene.

(Plates I. figs. $14,15,16$; II. figs. 11, 12 ; III. fig. 18.)
Ismene, Swainson, Zool. Ill. rol. i. pl. 16 (1820-21).

> Type, cedipodea, Swainson.

Antennæ: club rery robust, about twice as long as shaft, terminal portion tapering to a fine point and curved into a crescent, never bent into a hook. Palpi as already characterized. Fore wing: inner and outer margins subequal ; cell slightly more than half the length of costa; vein 12 reaching costa almost opposite end of cell; vein 5 equidistant from 4 and 6 ; upper discocellular minute, middle and lower discocellulars subequal, almost erect; vein 3 three times as far from base of wing as from end of cell; rein 2 three times as far from end of cell as from base of wing. Hind wing: cell very short, only reaching about one-third across wing; vein i twice as far from 8 as from 6; discocellulars rery faint, slightly outwardly oblique; vein 5 well developed; vein 3 just before end of cell; outer margin sinuate but not distinctly lobed. Hind tibiæ slightly fringed, and with two pairs of spurs. The above diagnosis is from a Javan female of typical cedipodea, and applies to the females of all other species of the genus.

In the males of all the species the hind tibire are much swollen, and have a long tuft of hairs affixed near the proximal end on the upperside, heneath which, along their outer edge, they are clothed with large rounded scales. This character is most fully developed in mahintha, and least of all in harisa, the other species showing a gradual transition between the two.

In typical oedipodea the male has a very prominent rounded patch of appressed scales on the upperside of the fore wing, owing to which the lower margin of the cell is strongly curved upwards, and vein 3 arises near the base of the wing and very close to vein 2 . On the hind wing vein 8 is very short, and runs upwards to the costa at a short distance from the base, and, just beyond it, the costal margin is folded over on the upperside. Vein 7 is much as in the female, but rein 6 is strongly cnrred downwards. The folding over of the costal margin on the upperside gives the wing, as seen from beneath, the appearance of being strongly arched at base and then cut away obliquely to just beyond vein 7 .

The above characters occur only in males of typical redipodec from Java and Borneo. In the Indian species, which has hitherto been considered to be identical with cedipodea and which I propose to rename ataphus, the veins of the fore wing are distorted as in odipodea; but the costa of the hind wing is not folded over, and the neuration of that wing is much as in the female.

The other species of the genus rary considerably in the male mark of the fore wing, which is sometimes very prominent and sometimes entirely absent, and there is also considerable variation in the distortion of the reins of the fore wing. Howerer, the character of the swollen hind tibie is invariably present and the females are inseparable, so I have considered it rery unadvisable to form new
genera on the male characteristics alone, and subjoin a key to the species of the genus in the collection of the British Museum.


The species are numbered in what would appear to be their most natural order. The females of all the species have vein 3 of the fore wing close to the end of the cell, as in the last group of the males.

This genus is confined to the Oriental region, Chinz ant Japan .

## Ismene ataphus, il. sp.

Ismene cedipodea, Moore (nec Swaiuson), Lep. Ceepl. vol. i. p. 158, pl. 64. figs. 2, 2a, $2 b$ (1881).

This species is the Indian representative of the Sumatran cedipodea, with which it has hitherto been confounded. The male differs from that of cedipodea in the costal margin of the hind wiug being normal, whereas in cedipodea the costal margin is folded over and the costal rein is correlatively distorted. The female has a costal red streak on the upperside of the fore wing which is entirely abseut in the female of cedipodea. Furthermore, in both sexes of cedipodea the thorax and base of wings are conspicuously clothed with long silvery greenish-blue scales; in ataphus this clothing is of a duller green and of less extent, especially ou the wings. The cilia of the hind wings are also much longer and redder in ataphus than in redipodea.

The present species is represented in the British Museum from Ceylon and Silhet, and it also occurs in Hong Kong.

Edipodea is in the British Museum from Jara, Borneo, and Macassar.

## 2. Gemis Hasora. (Plate II. figs. 1, 2.)

Hasora, Moore, Lep. Ceyl. vol. i. p. 159 (1881).
Type, badra, Moore.
Parata, Moore, Lej. Ceyl. rol. i. p. 160 (1881).
Type, chromus, Morre.
Antennæ: club thickening rather abruptly and gradually tapering to a fine point, bent beyond the thickest portion, usinally at about a right angle, but sometimes almost into a hook; the terminal portiou not quite so long as the remainder of the club. Fore wing: imer and outer margius subequal; cell less than two-thirds the length of costa; vein 12 reaching costa almost opposite upper angle of cell rein 5 nearer to 6 than to 1 ; upper discocellular minute; middle and lower discocellulars inwardly oblique and in the same straight line; rein 3 almost equidistant from base of wing and from end of cell; vein 2 nearer to base of wing than to vein 3 ; vein 1 distorted downwards near base. Hind wing produced into a lobe; rein 7 slightly nearer to 6 than to 8 ; discocellulars very faint, outwardly oblique ; rein 5 well dereloped, much nearer to 6 than to 4 ; rein 3 from just before end of cell ; vein 2 about equidistant from base of wing and from end of cell. Hind tibiæ not rery densely fringed, and with tro pairs of spurs.

The female differs in vein 3 of the fore wing being three times as far from base of wing as from end of cell.

The type-species of Parata differs from the type-species of Hasora in being prorided in the male with an oblique discal stigna on the fore wing, and also in some slight differences in the outline of the wings. These two characters, however, exist together only in the type-species of Parata, and we find other species with the discal streak of Parata and the outline of Hasora, or vice versd, while the streak itself appears in every degree of intensity, being sometimes rery prominent and at other times barely traceable or altogether absent, the females in all the species being structurally inseparable.

The species represented in the British Museum are divided below into two groups, based ou the degree of prominence of the sexual streak, and are numbered in what appears to be their most natnral order, which it will be seen does not agree at all with the dirisions founded on their sexual brand.

Of atrox, bilunata, and lugubris there are only females in the British Museum; of these the two former probably have a discal stigma in the male, and the last seems rery possibly to be the female of celoenus.

Other species of the genus are anura, de Nicéville, and hadria, de Nicéville, both fron India, and there are five unidentified species in the British Museum, most of which are probably undescribed.

This genus is represented in the British Museum from throughout India, Malarsia, the Philippines, Fiji, New Guinea, and Australia.


## 3. Genus Bibasis.

Bibasis, Moore, Lep. Ceyl. vol. i. p. 160 (1881). Type, sena, Moore.
Antemæ much as in Hasora, but the terminal portion of club usually much more hooked. Fore wing: male without costal fold or discal stigma; outer margin longer than inner margin ; cell only slightly more than half the length of costa; rein 12 reaching costa almost opposite upper augle of cell; rein 5 slightly nearer to 6 than to 4 ; upper discocellular minute; middle and lower discocellulars subequal, almost erect, and in the same straight line; rein 3 three times as far from base of wing as from end of cell, more than twice as far from 2 as from 4 ; vein 2 three times as far from end of cell as from base of wing. Hind wing not so broad as in Hasora; lobe less conspicuons; vein 7 nearer to 6 than to 8 ; discocellulars faint, slightly outwardly oblique, the lower the longer; vein 5 well developed; vein 3 just before end of cell; vein 2 nearer to end of cell than to base of wing. Hind tibiox not fringed but thickly scaled above, and with two pairs of spurs.

There is only one described species in this genus, which is recorded from India, Ceylon, and Jara.

> *sena, Moole.

## 4. Genus Badamia.

Badamia, Moore, Lep. Ceyl. rol. i. p. 156 (1881).
Type, exclamationis, Habr.
Antenm short, hardly half the length of costa; club moderate, usually bent into a hook, sometimes only at right angles, tapering to a point. Fore wing without discal stigma; outer and inner margins subequal; cell rery long and narrow, more than two-thirds the length of costa; vein 12 reaching the costa before end of cell; rein 5 equidistant from 4 and 6 ; upper discocellular minute, lower
and middle discocellulars subequal, inwardly oblique, and in the same straight line; vein 3 three times as far from base of wing as from end of cell; vein 2 twice as far from 3 as from base of wing. Hind wing excavated at vein 2 and produced into a promiuent lobe; vein 7 nearer to 6 than to 8 ; middle discocellular slightly outwardly oblique, and lower slightly inwardly oblique; vein 5 well developed; vein 3 well before end of cell; vein 2 abont equidistant from end of cell and base of wing. Hind tibiæ fringed, and with two pairs of spurs.
The type species, which is the sole representative of the genus, is of very wide distribution, the series in the British Museum being from localities ranging from Australia to the N.W. Himalayas.

## 5. Genus Rhopalocampta. (Plate I. fig. 13.)

Rhopalocampta, Wallengren, Rhop. Caffr. p. 47 (1857).
Type, forestan, Cram.
Choaspes, Moore, Lep. Ceyl. vol. i. p. 158 (1881).
Type, benjamini, Guérin.
Antennæ : club moderate, about as long as shaft, crescent-shaped, not bent into a hook, very similar to those of Ismene, but less robust and with a longer shaft. Fore wing: no discal brand in male; inner and outer margins subequal; cell just more than two-thirds the length of costa; vein 12 reaching costa before end of cell; vein 5 nearer to 6 than to 4 ; upper discocellular minute; lower and middle discocellulars almost erect and in the same straight line, the lower the longer; vein 3 three times as far from base of wing as from end of cell. Hind wing produced into a lobe; rein 7 twice as far from 8 as from 6 ; discocellulars very faint, almost erect ; vein 5 wanting; vein 3 from just before end of cell; vein 2 nearer to base of wing than to end of cell. IIind tibie with two pairs of spurs, and furnished in the male with a long tuft of hairs attached close to the proximal end, and reaching well beyond the distal end of the tibia.

This genus is confined almost entirely to Africa and the Malay Archipelago, benjamini alone being found in India, China, and Japan, while the range of anchises extends to Aden.

$\{$ pisistratus, Fabr. ...... 10.
ralmaran, Wallgr.

* fervida, Butl. ............ 11.
$\{$ keithloa, Wallgr. ...... 12.
$\{$ stella, Trim.
rate/c, Boisd. ............. 13.
bixe, Linn................. 14.
chalybe, West. ......... 15.
јuno, Plötz ................ 16.
\{ iphis, Drury ............ 17.
\{jupiter, Fabr.
hanno, Plötz ............ 18.

The following genera, of which the types are not in the British Museum, I have been unable to identify :-

Ætaeius, Hbn. Verz. 109 (1816).. Type, archytas, Stoll.
Aides, Billb. Enum. Ins. 81 (1820). Type, epitus, Cram.
Alera, Mab. C. R. Soc. Ent. Belg. lxxxiv. (1891)

Callimormus, Sc. Syst. Rev. 53 (1872)

Type, furcata, Mab.

Choranthus, Sc. Syst. Rev. 58 (1872)

Type, juventus, Sc.

Choristoneura, Mab. Bull. Soc. Ent. Fr. (6) ix. p. clvi (1889) . . .
Cceliades, Hbn. Verz. 106 (1816).. Type, dubius, Cram.
Corone, Mab. Pet. Nouv. p. 205 (1878)

Cymenes, Sc. Syst. Rev. 61 (1872).
Enosis, Mab. Bull. Soc. Ent. Fr. (6) ix. p. ix (1889)

Type, radians, Lef.

Exometaca, Meyr. P. Linn. Soc. N. S. W. (2) ii. p. 833

Type, nycteris, Meyr.
Garga, Mab. Le Nat. ii. p. 216 (1889)

Type, olena, Mab.
Hemipteris, Mab. Le Nat. ii. p. 216 (1889)

Type, fumida, Mab.
Narga, Mab. C. R. Soc. Ent. Belg. p. $\operatorname{lxx}$ (1891)

Nerula, Mab. Le Nat. ii. p. 255 (1888)

Nyctus, Mab. C. R. Soc. Ent. Belg. p. cxir (1891)

Oarisma, Sc. Syst. Rev. p. 54 (1872) Type, poweshiek, Pack.
Praxis, Mab. Le Nat. ii. p. 25 (1889)

Type, quadrata, Mab.
Pachyneuria, Mab. Le Nat. ii. p. 275 (1888)
Plesiocera, Mab. C. R. Soc. Ent. Belg. p. cri (1891)
Ploetzia, Saal. Müll. Lep. Mad. i. p. 115 (1884)

Type, amygdalis, Mab.
Systole, Mab. Lép. Mad. i. p. 330 (1885)

Potanthus, Sc. Syst. Rev. 54 (1872)
Prenes, Sc. Syst. Rev. 60 (1872)
Stethotrix, Mab. Bull. Soc. Ent. Fr. (6) ix. p. clxxxiv (1889)

Type, amygdalis, Mab.
Type, omaha, Edw.
Type, panoquin, Sc.

Toxidia, Mab. C. R. Soc. Eut. Belg. p. $\operatorname{lxex}$ (1891)

Type, heterogyna, Mab.

Zea, Dist. Rhop. Mal. p. 377 (1886). Type, mytheca, Hew.
The genus Helias, subsequently renamed Achna, has not been included above, as its type species is unknown.

## EXPIAANATION OF THE PLATES.

## Plate I.

Fig. 1. Ardaris eximia (showing reins numberel), p. 13.
2. Pyrrhopyge charybdis, p. 11.
3. Microceris variicolor, p. 15.
4. Epargyrcus tityrus, p. 23 .
5. Phocides pigmalion, p. 21.
6. Tursoctenus papias, p. 21.
7. Phanus vitreus, p. 40.
8. Anisocharia albiplaga, p. 59.
9. Tagiades flesus, p. 53.
10. Eantis busiris, p. 57.
11. ILesperia maluce, p. 64.
12. Caprona ransonnetii, p. 62.
13. Rhopalocampta forestan, p. 129.
14. Ismene cedipodea, dª $^{7}$ p. 125. .
15. Ismenc ataphus, ${ }^{0}, \mathrm{p} .125$.
16. Ismene ataplus, ㅇ, p. 125.

## Plate II.

Fig. 1. Hasora badra, ơ, p. 127.
2. -- 오, p. 127.
3. Halpe moorei, ס̄, p. 108.
4. - ㅇ, p. 108.
5. Onryza meilitila, oै, p. 112.
6. Augiades syluanus, ㅇ, p. 103.
7. Telesta perronii, ơ, p. 73.
8. Koruthaialos hector, p. 76.
9. Sancus pulligo, ס", p. 87.
10. Cyclopides matis, p. 90.
11. 1smene mahintha, ${ }^{\circ}$ (lind leg $\times 2$ ), p. 125.
12. Ismene adipodea, of (hind leg $\times 2$ ), p. 125.
13. Tarsoctenus corytus, ${ }^{\circ}$ (hind $\operatorname{leg} \times 2$ ), p. 21.
14. Eantis busiris, $\sigma^{7}$ (hind $\operatorname{leg} \times 2$ ), p. 57.
15. Chrysoplectrum otriades, of (hind leg $\times 2$ ), p. 24.
16. Ethilla eleusinia, of (hind $\operatorname{leg} \times 2$ ), p. 37.

## Plate III.

Fig. 1 a,b. Pyrrhopyge charybdis (antenna and palpi $\times 2$ ), p. 11.
2. P'hocides pigmalion (antenna and palpi $\times 2$ ), p. 21 .
3. Eitdamus proteus (antenna and palpi $\times 2$ ), p. 20.
4. Plestia dorus (antenna and palpi $\times 2$ ), p. 21 .
5. Ethilla eleusinia (antenna and palpi $\times 2$ ), p. 37.
6. Phænicops beata (antenna and palpi $\times 2$ ), p. 30 .
7. Bungalotis midas (antenna and palpi $\times 1 \frac{1}{2}$ ), p. $\simeq 8$.
8. Dyseophus sebuldus (antenna and palpi $\times 2$ ), p. 27.
$9 a, b$. Enthcus tulaus (antenna and palpi $\times 2$ 2), p. 40.
$10 a, b$. Anisochoria albiplaga (antenna and palpi $\times 2$ ), p. 59.
11. Tagiades flesus (antenna and palpi $\times 2$ ), p. 5.3.

12a,b. Camptoplezra theramenes (antenna and palpi $\times 2$ ), p. 55.
$13 a, b$. Nycteris ccerula (antenna and palpi $\times 2$ ), p. 56.
14. Cyclopides motis (antenna and palpi $\times 2$ ), p. 10 .
15. Caprona pillaana (antenna and palpi $\times 2$ ), p. 62.
16. Abantis tettensis (antenna and palpi $\times 2$ ), p. 133.
$17 a, b$. Eantis busiris (antenna and palpi $\times 2$ ), p. 57 .
$18 a, b$. Ismene cedipodea (antenna and palpi $\times 2$ ), p. 125.
19. Hespcria malve (antenna and palpi $\times 3$ ), p. 64.
20. Taractrocera mavius (antenna and palpi $\times 3$ ), p. 94.
21. Butleria dimidiatus (antemna and palpi $\times 2$ ), p. 79.

Fig. 22. Telesto pcrronii (antenna and palpi $\times 2$ ), p. 73.
23. Motasingha dirphia (antenna and palpi $\times 2$ ), p. 73.
24. Ceratrichia phocion (antenna and palpi $\times 2$ ), p. 117.
$25 a, b$. Iambrix salsala (antenna and palpi $\times 2$ ), p. 76.
$26 a, b$. Apaustus menes (antenna and palpi $\times 2$ ), p. 96 .
$27 a, b$. Adopea thaumas (antenna and palpi $\times 2$ ), $p .98$.
28. Baoris oceia (antenna and palpi $\times 2$ ), p. 106.
29. Parnara mathias (antenna and palpi $\times 2$ ), p. 105.
30. Gegenes nostrodamus (antenna and palpi $\times 2$ ), p. 104.
2. Descriptions of New Spccies of Dipterous Insects of the Family Syrphide in the Collection of the British Museum, with Notes on Species described by the late Francis Walker.-Part I. Bacchini and Brachyopini. By E.E. Austen, Zoological Department, British Museum.

> [Received December 2, 1892.]
(Plates IV. \& V.)
The following is intended to be the first of a series of papers on the Syrphidre in the Collection of Diptera in the British Museum. For some time past I have been engaged in working on these Insects, and it was my original intention not to publish anything upon the subject until the re-arrangement of the Family had been completed. But since it has been urged upon me that a saving of time is effected by writing about a group while it is fresh in one's memory, I have decided to begin the preparation of these papers at once. This is the reason why I have commenced in the middle of the Fanily.

Appended is a list of the species now to be described, with their habitats.

Ethiopian Region.
Rhingia semi-ccrulea, p. 162 ....................... Sierra Leone.
Oriental Region.

| Baccha nubilipenmis, p. 136 | Ceylon. |
| :---: | :---: |
| triangulifera, p. 138 |  |
| ", pulchrifrons, p. 139 | ", |
| amphithoe, p. 142, Wlk. (re-described)... | M |

Australian Region.
Baccha bieolor, p. 137 .................................. Mysol.



[^0]:    ${ }^{1}$ dnn. Mag. N. H. (6) x. p. 475 (1892).

[^1]:    ${ }^{1}$ Bull. Buff. Soc. Nat. Sc. vol. i. pp. 195-196 (1874).
    ${ }^{2}$ Ann. Soc. Ent. Belge, vol. axi. p. 12 ct seq. (1878).

[^2]:    ${ }^{1}$ Stett. ent. Zeit. rol, xl, p. 477 et seq. (1879).

[^3]:    $\dagger$ In Amenis rein 5 of the hind ming is sometimes well dereloperl, but the genus can be readily separated from Ardaris by the hind tibiae being provided with two pairs of spurs, the terminal pair only being present in Ardaris.

[^4]:    * The form of the antennæ aloue will readily distinguish these two genera from the remaining genera in this section which have only one pair of spurs on the bind tibix.

[^5]:    crythus, Cramer. ㅇ...... ti.
    *nicephorus, Hew. of ... 7.
    scbrus, Feld. of ......... \&
    *pclignus, Іет. о'.
    *gonatus, Hew. heras, Mab. of

[^6]:    * The slight difierences in shajee of wing between the type species of Pythonides and Nisoniales cannot be expressed in a key. Most probably these two genera, as well as Cycloscmia, are not really sufficiently distinct to be kept separate, and it would be more correct to include all three genera under Nixnniades.

[^7]:    Upperside of hind wing with no discal pale band......... tethys, Mén. 1. Upperside of hind wing with a discal pale band.
    With a large transparent spot in coll of fore wing.
    Cilia of hind wing white ............................. $\left\{\begin{array}{l}\text { ineorei, Mab. } \\ \text { *felderi, Butl. }\end{array}\right.$
    Cilia of hind wing dark.
    Band on underside of bind wing of large extent, reaching up to or beyond the costal ner vure.
    Black spots on upperside of hind wing prominent
    Black spots on upperside of hind wing merged in the marginal band
    Band on underside of hind wing much restricted, not extending beyond the upper angle of cell.
    bhagava, Monre. U.
    sinica, Felder. $t$. celcbica, Felder. 5 *permona, Hew.

    With a small transparent spot in cell of fore wing. sometimes absent.
    A large transparent spot below cell, below which are two opaque ones reaching to inner margin. Band on hind wing broad narada, Moore. 6. A large transparent spot below cell, with no opaque spots below it. Band on hind wing narrow .. phisara, Moore.

[^8]:    stigina, Feld.
    4.

    * cmpoleus, Westw. ......... 5.

[^9]:    ${ }^{1}$ Rhop. Mal. pl. xxxiv.

[^10]:    *calathus, Hew.

